

Wildlife & Parks Magazine

Seven Turkey Calls You Should Know

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Venture to Fall River State Park Pg. 38

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FRONT COVER An angler finds a striped bass at the end of their line. Agency photo. **INSIDE COVER** A sunset at Fall River State Park. Rick McNary photo.

Editorial Creed: To promote the conservation and wise use of our natural resources, to instill an understanding of our responsibilities to the land.

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with Brad Loveless

Every Moment a Memory



As I sat on a very cold (-10 F) February night, I had planned to write about the spectacular opportunities for anglers in Kansas in 2021; but constant interruptions by my 11-year-old lab, Sandie, diverted my focus. When she comes over, leans against me, and looks at me to stroke her gray head, I can't resist. My mental math pits writing the next sentence against not just petting her but honoring all that she represents.

There was the time as a pup that she pointed a rooster in between three of us as we were puzzling at the end of a Hays milo field, discussing why there were no birds. And the time when hunting with new - now old - friends in Garden City and she insisted on going to retrieve a quail even though Ralph was certain he missed it; it turned out to be a beautiful male bobwhite. And on a tough, very cold weekend, she worked a rooster south along a shelter belt for my buddy's son trying to get his first pheasant. He wounded the bird moving south, which then turned west, making it 120 yards or so before it glided into the stubble. Sandie was after it the whole way. I was running after her, intent on closing the deal. She trailed west into the next hedge row, then turned north. By the time I got there she was 150 yards farther away. I was just in time to see the rooster jump in the air one last time when Sandie equaled his leap. The icing on the cake was seeing the boy take the bird from her mouth. It's memories like these that make the outdoors, and dogs like Sandie, so special to me.

Looking at a fishing pole I've got leaning against the garage wall triggers memories of seeing my granddaughter and her little brother marveling at the beauty of their first bluegill; and a grandson catching a largemouth with the sun

setting behind him. He had a hard time lifting it for a picture. And that smile!

The .22 rifle shell on my desk reminds me of my brother's and my shared memory of the cottontail hunt when it seemed the rabbits would never guit hopping out of those brush piles.

As I get older, I treasure these Kansas snapshots more and more. Many of them have become slightly faded and even tattered around the edges. Some from recent years are still sharp and bright. My recollections can be triggered by many things - a voice on the phone, a gnarled hedge tree, a familiar shotgun or a pair of oars in the barn's corner. You have your own set of triggers for your own treasured Kansas outdoor memories, and I hope you, too, continue to gather more.

Record numbers of Kansans created lifelong outdoor memories in 2020, some for the very first time. Whether it was a hike, a hunt, a swim, or a sunrise, they're now the proud owner of priceless experiences.

The year 2021 presents a host of opportunities to add to these memories, either by yourself or with friends. The Kansas Department of Wildlife, Parks and Tourism strives to



help you enjoy Kansas' many natural wonders, and we offer our best advice www.ksoutdoors.com. I'm making plans and hope you are, too. Until then, this good old dog has laid her head on my boot and these boots remind me...

CORRECTION: The Common Ground column titled "Righting a Wrong," published November/December 2020 issue, incorrectly listed Rep. Dave Baker's name as Rep. Dave Barker. In the same column, it was not clarified that the engineering contractor who worked on the Flint Hills Trail and Doug Walker from the Kanza Rails-Trails Conservancy are two separate people. Kansas Wildlife & Parks Magazine staff deeply regret these errors.

Letters To The Editor

A Job Well Done

Dear Sir & Madam.

As a ninety-year-old, I do not ordinarily write "Fan Letters" - but your remarkable cover photo of a big rooster-pheasant in flight on your Nov./Dec. 2020 issue stimulated approximately 75-year-old memories of youthful hunting in Kansas. Your cover photo symbolizes your long continuous development of that species, from introduction thru decades of professional protection and enforcement and honest "selling;" until now, you've given us the country's best hunting for that amazing big bird!

When I was a teenaged hunter (1943-49) living a block away from the south city limits of McPherson, I hunted most every day in season - walking with my family's old octagon barreled pump 22 along a creek or railroad south or west of town. Cottontail rabbits were carefully head-shot so as to spoil minimal meat and at one time, we had some 50 in the rented frozen food locker. No pheasant - the only season was a weekend for counties along the Nebraska border. I hunted with a student friend (Tibbets) on his folks' farm up there and some years we'd get a pheasant. Wow! There were very few pheasants locally, and we were a law-abiding family, so they were safe with us. My dad (Russell J. Anderson, Dean of Central College) told me, "If we don't shoot 'em now, someday we will have a season here." We had faith in the effectiveness of your organization and sure enough, you came through!

It took years of your professional effort, cooperative farmers and a law-abiding population. You did it! And in celebration of such success, your excellent magazine posted the beautiful cover photo!

Thank you,

Donald M. Anderson, PhD

Dear Mr. Salyer,

I sincerely appreciate your candor, and willingness to share your thoughts directly with me and my staff. I won't aim to sway your opinion, as I've learned that diverse opinions can lead to improved processes and products. I also won't attempt to encourage you to renew your subscription, if you wish to invest your dollars elsewhere you have every right to subscribe to publications for which you believe you are getting the best value. That said, our photo issue continues to be a favorite among the majority of our readership, with the highest "newsstand" sales of any other issue throughout the year, so I must respectfully disagree.

Feedback over the years indicates that the wildlife images we publish provide our readers with a direct connection to some of Kansas' most fascinating wildlife species in a way that would have otherwise been impossible, especially for readers who are physically unable to get out-of-doors and safely navigate the habitats where these species reside. The photo issue is also a means of celebrating outdoor photography, and the many talented Kansas photographers behind the lens. For these reasons, I envision wildlife photography and our special photo issues being a mainstay in our print schedule for many more years to come. In fact, I would go so far as to say our wildlife photography is a large part of why our publication has remained in print for more than 78 years, and I certainly don't want to be responsible for breaking that streak!

I thank you for being a reader, and for your past investments in our publication.

All the best,

Nadia Reimer, executive editor

Photos Aren't Everything

Dear Ms. Reimer

This may be the only letter you receive on this subject but I would like to express my displeasure with the current issue that came today. I enjoy a special wildlife picture from time to time but an entire issue is too much.

I enjoy the hunting and fishing stories written by members of your staff and others and look forward to reading them and if they want to enclose pictures of their success that is fine. If my subscription was just coming due, I would probably not renew and may not when it does come due.

I may be the only one who feels this way but felt I wanted to let you know.

Sincerely,

Theron Salyer

A Peer Review

Dear Nadia:

I wanted to tell you that I think you're doing a great job with Kansas Wildlife & Parks Magazine.

Ours are tough, thankless jobs. I know how hard it is to produce a lively, interesting magazine, one that serves both subscribers and the agency. You're doing that, striking just the right balance. I like also how you're giving the publication a voice with your captions, species profiles, and, especially, your Backlash column. Well done all around!

Best regards,

Tom Dickson, editor, Montana Outdoors

P.S. That cover photo for November-December 2020 was stunning.

I'm often asked what my favorite bird is. That's a difficult question for me, as I like most all of them! If I'm hard-pressed, I'd have to say that short-eared owls are among my favorite species for sure.

Short-eared owls are one of the most widely distributed owl species in the world, with populations in North America, South America, Europe, Asia and extreme northern Africa. Some are also found on the islands of Hawaii, southeast Asia, the Caribbean, and the Galapagos. They are found in the tundra, temperate grasslands, tropical savannas and wetlands.

These owls are nomadic wanderers, searching for food in the form of primarily small mammals, rat-sized and smaller. Depending on their location, they will sometimes take

larger prey up to the size of cottontail rabbits or muskrats and will take some birds up to the size of gulls and rails. They are typically solitary except in breeding season when they pair up, but usually only for a year. They are known to roost in larger groups in areas where food is abundant in winter, sometimes using eastern red cedar trees, but they usually roost on the ground in tall grass when they are here in Kansas. Upland bird hunter often flush them when hunting CRP or waterways.

Short-eared owls are considered mediumsized, with wingspans of 33 to 40 inches, a length of 13 to 17 inches and weighing less than one pound. They are usually buff colored with darker brown splotches and some white on the underparts. The light underwing areas show black "commas" when they are in flight. This species has very small "ear" tufts on top of the head, but the tufts are not their ears, as those are located on the sides of the head. They have an interesting way of hunting by flying low over grasslands

and marshes, with a floppy, moth-like manner using both their ears and eyes to detect prey. They rest during the day on the ground or sometimes in dense trees, then come out an hour or so before dusk to start hunting. They utilize the same habitat as Northern harriers - a species of hawk - and often interact with them before dark when the hawks go to roost. The competition sometimes can be fun to watch as they chase one another around, with the owls giving a barking-type call. They usually go back into roost an hour or two after dawn.

Nesting occurs on the ground, with a bowl-shaped scrape lined with dead grass and feathers. Clutch size varies from a single egg to as many as eleven with a variable incubation time of 21 to 37 days, and young fledge in two to three weeks.

> They are known to do a "broken wing" display to lead predators away from nests much like killdeer do. Male birds will catch prey and feed the female when she is on the nest. Some short-eared owls stay in Kansas to nest, but probably not every year. I read about a study done on some nesting females in Alaska that were fitted with transmitters, with migration movements tracked after the breeding season. If I remember correctly, out of a half dozen or so individuals, a couple wintered in Alaska, one was in Washington, one was in Arizona, one in Kansas and one was in central Mexico. It seems random as to whether they stay in a particular area or leave to fly thousands of

> > This past winter was a great time in the Midwest to see short-eared owls, with many locations hosting them such as the marshy areas of the state like Quivira National Wildlife Refuge, Chevenne Bottoms and many other grasslands, hosting multiple birds. The rodent population must be high to have that many around our state and adjacent states as well. Some will linger into early spring, so there are still opportunities to see them in proper habitats. They are best observed on windless late afternoons and can be a real treat!



LAW ENFORCEMENT SPOTLIGHT

Top Social Media Posts

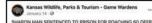


Kansas Wildlife, Parks & Tourism - Game Wardens

Last Thursday around 2:30 PM, a bow hunter in Jackson County spotted two whitetail deer that appeared to be struggling to free themselves (antlers locked) and notified a Game Warden about their unfortunate entanglement. Two Game Wardens immediately responded: the first warden on scene was unable to spot the deer from the road so he contacted the landowner, informing him of the incident, then began searching for them. Shortly after the second warden arrived and began searching, they located them. At the time, the wardens didn't know how long the bucks had been struggling to free themselves, but quickly observed that the deer had enough energy and wariness remaining, to make approaching them difficult and potentially dangerous. However, the wardens were determined to do their best to save them from an excruciating death. The Game Wardens would like to thank the bow hunter who reported it and cooperating landowners for their help in preventing that from happening.



1.9K 113 Comments 228 Shares





The end and conclusion to a multi-month investigation involving Fort Riley Game Wardens and Kansas Game Wardens. The press release (link below) was just put out yesterday by the DOJ, US Attorney's Office. The case took place in 2019 and was wrapped up in 2020. Multiple subjects from multiple states and jurisdictions mostly dealing with criminal trespassing on the Impact Area at Fort Riley. The reason why nobody is allowed in the Impact Area is for safety concerns due to the possibility of live unexploded ordin on the area. The investigation involved multiple misrepresentation to obtain licenses and permits outside of Fort Riley; the seizure of deer and Elk antlers, and mounts; hunting equipment; and stolen federal property. Click on the link below for additional information concerning sentencing imposed on the suspects. Great team





Follow Kansas Wildlife, Parks & Tourism - Game Wardens on Facebook to stay up-to-date on poaching cases, rules and regulations, events and more!

WHAT AM I? ID Challenge

Using only the image and clues below, see if you can figure out this month's mystery species!



Clues:

- 1. Like a shark, my skeleton is made up of cartilage, not bones.
- 2. I have a long rostrum, or "nose."
- 3. I can live more than 30-35 years and reach weights over 100 pounds!
- >>> See answer on Page 14.



Boating Safely Requires the Right Equipment

with Chelsea Hofmeier

Warmer weather is on the horizon and it is time to prepare for another great boating season in Kansas. Part of that preparation includes making sure you and your boat have everything required to operate legally and safely in the state. The last thing you want to do is set off on your maiden voyage of the season only to realize you forgot a very important piece of equipment.

The equipment required to be on board depends on what type of boat you are operating. Here are the main items required based on type of vessel:

Boat Number and Decals

Just as you must have a vehicle registration for your car, all vessels powered by motor or sail must be registered and numbered. To renew your registration, go to a state park, a regional office or one of our boat registration agents. A registration can also be renewed by mail or phone through the Pratt operations office or online. If you are a new boat owner, you can register at one of the above physical locations or fill out the Application for Certificate of Number Kansas Boating Act Form and mail it into the Pratt operations office along with the \$42.50 registration fee. All of this information can be found on ksoutdoors.com under the boating tab.

Boating Education Certificate

Any person under the age of 21 who wishes to operate a vessel propelled by motor or sail without being under direct and audible supervision must complete an approved boater education course. No one under the age of 12 may operate a motorized vessel without direct and audible supervision regardless of boater education.

Life Jackets

All boats must have one properly fitted and in serviceable condition, Type I, II, III, or V life jacket for every person on board. The life jackets must be readily accessible, which means not in an enclosed compartment. Children 12 years old and younger must wear a life jacket at all times. Each person riding a personal watercraft (PWC) must wear a lifejacket at all times. Any vessel over 16 foot powered by a motor or sail must have a Type IV throwable flotation device on board as well.

Navigation Lights

All boats must use navigation lights while operating on Kansas waters between sunset and sunrise. Motorboats must have a red and green light as well as an all-round white light. The placement of these lights depends on the specific type of boat you are operating. Manually propelled boats must carry a white flashlight or lantern. It is illegal to operate a PWC between sunset and sunrise.

Other requirements for motorboats include a sound producing device, fire extinguisher, ventilation system, muffler, and backfire flame arrestor.

One item that is not required, but is very handy, is the KDWPT Boating Regulations Summary Booklet. This is a great little booklet to review before the boating season begins, to make sure that you are brushed up on the boating laws and regulations, including all this important required equipment specific to the boat you will be operating. You can find these booklets at any of our state parks or regional offices, or you can download a PDF copy at ksoutdoors.com under the boating tab.





How to Mentor a New Turkey Hunter

with Tanna Fanshier

Few things compare to the sound of a turkey gobble cutting through the stillness of a dewy spring morning. Few things, that is, except witnessing that spark of excitement and anticipation flash across the face of a new hunter experiencing this moment for the first time.

Considering mentoring for the first time this year? There is no greater way to support the future of hunting and conservation than by sharing your passion, knowledge and time with someone new - no matter your experience level! If you are new to mentoring, here are a few tips and tricks to ensure a great spring turkey hunt for both you and your mentee this year - bird or no bird.

Step 1: Ask

Data shows that one of the top barriers to hunting participation is not having anyone to go with! Many potential participants report "never being asked" as a top reason why they don't hunt, or hunt more often. Hunting for the first time can be intimidating, especially to someone with limited firearm experience. Be patient, but persistent in offering your support. Even if your potential mentee declines, remind them that the offer remains on the table, and that you would be happy to talk to them about hunting anytime.

Step 2: Get to know your mentee, and their motivations for hunting

There are many different factors that may motivate your mentee to join you for a hunt. While some may take pleasure in being part of a rich and historic hunting tradition, others are most excited by the thought of lean, organic protein in their freezer or the opportunity to watch the natural world wake up from cover of a hunting blind. Your mentee is likely driven by a combination of motivators. Take the time to get to know your mentee, their experience level and interests, and tailor your hunting plans and conversations to best serve their motivations and needs.

Step 3: Obey the law

If your mentee has agreed to hunt with you, congratulations! There is a wonderful journey for both you and your mentee ahead. To maintain the maximum level of comfort, safety and education, be sure to ask your mentee about hunter education and help get them into a class if they haven't already

been certified. A list of courses can be found at www.ksoutdoors.com/ Services/Education/Hunter/Class-Schedule.

If your mentee can't get into a class and is 16 years of age or older, be sure to tell them about the Apprentice Hunting License - a license that will allow them to hunt for a year without Hunter Education under the direct supervision of a licensed hunter age 18 or older, and can be purchased a total of two times. Remember, your mentee will likely need guidance on where to purchase their license and permit. A list of license vendors can be found at www.ksoutdoors.com/License-Permits/Locations-to-Buy-License-Permits. Licenses can also be purchased printed online and www.ksoutdoors.com/Hunting/ Applications-and-Fees, or bought and stored on the HuntFish KS app.

Step 4: Practice the shot

Handling a firearm for the first time can be extremely intimidating, especially in the field. Do your mentee a favor prior to the season and take them out to practice their shot. If possible, have your mentee practice shooting the same firearm that they plan to hunt with to maintain accuracy and muscle memory. Patterning a shotgun with a paper turkey target can be a fun and useful activity, providing a great opportunity to discuss shot placement for the most effective and ethical harvest.

Step 5: Scout

With all your homework done, it is finally time to scout! Even if you already have a spot picked out, consider scouting with your mentee to teach

them the signs to look for in the field. If possible, take your mentee along for evening hikes, a drive with a pair of binoculars, or in a canoe trip down the creek. If you can identify tracks, scratches or a turkey's roosting tree, you are on your way to a successful hunt! This is also a great time to demonstrate different calling techniques. Look to YouTube for guidance and tips. Remember to check out turkey information under the, "Hunting," then "What to Hunt" tab on ksoutdoors.com to brush up on turkey season information, regulations, research and more!

Step 6: Comfort

As you prepare to finally go on your hunt, consider providing comfort items that your mentee may not have thought of. Handwarmers, earplugs and a water bottle could go a long way in making your mentee comfortable and will improve the trip overall. A Kansas Hunting and Furharvesting Regulations Summary makes a great gift and will provide some reading material for the blind. Sitting side-by-side with your mentee will allow for safe, effective communication and a shared view of the mentee's zone of fire.

Step 7: Cooking your harvest

Don't forget, the best way to celebrate a successful hunt is with the cleaning and cooking of your harvest. Be sure to show your mentee your favorite way to prepare wild turkey and share the locally harvested meat and memories amongst friends.

Good luck to the season's new and returning turkey hunters, and a special thank you to those who mentor!



HUNTING Seven Deadly HERITAGE Range "Sins"

Any time we head out to the shooting range, our goal should be to have a safe and enjoyable experience. Following basic safety rules and being courteous to others on the range are keys to making that happen. As a reminder, I thought I would share some ideas that Ed Head, veteran Gunsite instructor, calls the "seven deadly range sins."

1. Ignoring essential safety rules and failing to follow instructions

Some people believe that the rules just don't apply to them. That feeling of entitlement can make them dangerous. Safety is essential and is non-negotiable on the range! The four basic firearms safety rules we teach and observe in hunter education classes are:

Treat every gun as if it is real and as if it is loaded. Always.

Never point any gun at anything you do not want to destroy.

Keep your finger out of the trigger guard and off the trigger until you are on target and you make the decision to shoot.

Be certain of your target and what is behind, in front of and beside that target before you decide to shoot.

2. Poor gun handling

You are the one who can control your firearm; it isn't anyone else's responsibility. Be responsible and if you need help, take a class to get better.

3. Speed holstering

Returning a handgun to the holster can be tense. A lot of situations can happen and many of them are not good. When it comes time to holster your handgun, go slowly and be careful.

4. Turning around on the firing line with a gun in your hand

This is an example of entitlement that is not acceptable on the range and can be dangerous. Follow the four firearms safety rules every time you go to the range - every time!

5. Bending over with a gun in your hands

If you drop something, leave it until the firing line has been declared safe. It is not the time to police brass or inspect a misfire.

6. Handling firearms when the range is cold and people are down range, or handling firearms behind the firing line

When the range is cold, all firearms should be unloaded, actions open and benched or made safe and holstered. Stepping off the line and checking sights or looking through a scope while others are down range dealing with targets is not just discourteous, but downright dangerous. If necessary, refer to the four firearms safety rules again.

7. Not using proper hearing and eye protection

It may take time to wreck hearing, but vision can be lost in an instant. There is no excuse for not protecting yourself, but you should never allow someone else on the range unprotected. Just because they aren't shooting, doesn't mean they don't need protection. Don't be cavalier about this. You will shoot better protected.

This list is by no means comprehensive, but it will go a long way to keeping your time safe and enjoyable. Now, go out and hit the range.



FRINGED PUCCOON

BY KRISTA DAHLINGER

Fringed puccoon plants have dainty yellow trumpet shaped flowers with petals that are ruffled around the edges. Once you have seen a fringed puccoon in bloom, the unique flower shape is unforgettable, and you can easily identify the plant from then on. The scientific name is *Lithospermum incisum*, meaning plant with a stone-like seed. Common names are narrow leaf gromwell and narrowleaf stoneseed. This plant is one of 2,000 species that belong to the borage family, all having five petaled flowers, and including familiar plants such as bluebell, marbleseed, heliotrope and forget-me-not.

The bright yellow, trumpet shaped flowers are only about one-half inch wide and up to 2 inches deep, with five ruffled petals opening outward. Blooms occur from April through May. When growing among tall vegetation, fringed puccoon can grow up to about 18 inches tall to compete for sunlight. In mowed or shorter vegetation, the plant is more likely to spread out than up. The leaves are narrow and lance shaped with pointed tips, and arranged on alternate sides of stems. Branched side stems occur on the upper half of the main stem. These plants are perennial forbs, with the above ground part of the plant dying back each year and then growing new stems from the root in the spring. Over time, mature roots can support making additional upright stems and the plant becomes more robust. The stems and leaves on their own are rather unremarkable and the plant is barely noticeable when not in bloom.

Fringed puccoon can be seen in almost every county in Kansas, in dry upland prairie habitat, edges of meadows and on disturbed or rocky soils. In the U.S., they are found west of the Mississippi River, and north into Canada. There are about 20 other species of Lithospermum found in the U.S. In the eastern two tiers of Kansas counties, hoary puccoon, *Lithospermum canescens*, and Carolina puccoon, *Lithospermum caroliniense*, are found, both of which have orange-yellow flowers and fine silvery hairs on the leaves. These two species do not feature ruffled petals.

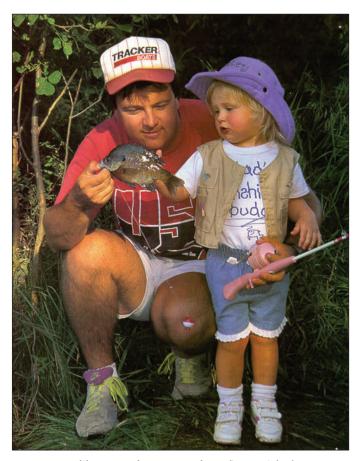
Fringed puccoon may give some minor forage value to browsing and grazing wildlife through the leaves and seeds. Historical uses include harvesting the root to make blue dye; boiling the root, stems and leaves to make healing teas; or applying mashed parts of the plant to aid numb or afflicted body parts. Outer leaves were dried and burned as a ceremonial incense. The word "puccoon" is derived from a Native American word for "dye plant."

Plants do not readily propagate from seed. Cuttings can be taken from small stems in the fall and treated with plant hormone to stimulate root growth. Transplanting is usually not successful because it is easy to damage the fragile tap root; this may be a plant that is best observed where it grows and appreciated for its exotic beauty.

EVERYTHING OUTDOORS

So Long KDWPT!

with Marc Murrell



It seems like yesterday I penned my first article for Kansas Wildlife and Parks Magazine as a newly hired wildlife information representative in 1989. It was called, "Goatsuckers, Bullbats, Pisks and Piramadigs," and was a natural history piece focusing on a unique Kansas bird, the nighthawk.

A lot has happened with me and the Kansas Department of Wildlife, Parks and Tourism (KDWPT) since that time and I find myself reflecting on all of it. After a 32-year career with KDWPT, I'm retiring in March.

One of the constants in my career has been this magazine. I've authored hundreds of feature articles and columns and a similar number of my photos have graced these pages.

Readers watched my three adult children grow up. My daughter, Ashley, 28, was on the cover of the May-June 1996 issue with a much younger and skinnier version of me kneeling behind her as she caught her first fish at two and a half years old. The feature, "Promise in Her Eyes," hypothesized about all the outdoor adventures I hoped to have with her as she grew up. Many came true, and others followed with her six year younger twin brothers, Brandon and Cody. Some of my favorite

pieces involved sharing the outdoors with my family.

Much of my career focused on relaying that very idea - how much fun hunting, fishing, hiking, camping and trapping can be for individuals, families and friends. I spent the equivalent of roughly a year at the Kansas State Fair (30 years at 10 to 12 or more days per fair) visiting with people about the outdoors, answering questions and even forming lasting friendships. I watched fair visitors' kids grow up and heard stories about their latest outdoor pursuits each September. There's a good chance I've chatted with every landowner in Kansas' 105 counties.

Other communications focused on more specific goals, such as those in the "Pass It On" program started in 2000. Local wildlife biologists and other KDWPT employees did wonderful work organizing youth deer and turkey hunts for kids and adults alike and I participated in several of those for nearly 20 vears. I conducted outdoor skill seminars across the state on a variety of topics. I had more than 400 people show up to the Great Plains Nature Center (GPNC) for a "Do-It-Yourself Deer Processing" seminar one evening and had to turn half of them away due to fire code capacity restrictions, as the Coleman Auditorium seated only 188. I told them to come back same time next week and we'd do it again. Some of the most satisfying moments in my career came from people involved in those hunts and seminars that say "thank you" years later or describe how they went on to bigger things outdoors.

I've spent the last 25 years at the Great Plains Nature Center, the last three as director. My recent goal was to expand on the mission and vision that City of Wichita employee Bob Gress had when he put that place together, with the help of the KDWPT and U.S. Fish & Wildlife Service. It's been a good run. But it's time to close the last chapter of this book and open another one.

I've accepted a position to become the next executive director of the Kansas Wildscape Foundation. It's a non-profit organization started in 1991 by former Governor Mike Hayden to promote and create public outdoor opportunities for all Kansans. So, I won't be straying too far from what I enjoy.

Equally good news for me is executive editor, Nadia Reimer, will allow me to continue writing this column and the occasional feature for this magazine. It's one of the things I've enjoyed most and I'm humbled to continue. I've got more material, too, as my first grandchild, Hadley, is about 15 months old. From the looks of her temperament and personality, she'll be game for anything outdoors just like her momma. Stay tuned for the next generation and more fun in the great outdoors!

FISHIN'

with Mike Miller

Tie on a Golden Oldie

I saw a t-shirt once, it might have been mine, I can't remember, but it had a picture of a guy looking into a large, wellstocked tackle box with the words:

"So many lures. So little time." If the

t-shirt was mine, I wore it out, because I'd still wear it today if it fit. That's my motto.

I love new lures and techniques anglers invent to catch fish. They don't all work, but I always discover one or two that help me catch more fish. Unfortunately, I can get too immersed in the new and forget the old. To catch fish consistently, an angler must keep an open mind.

Dad and I have fished in Canada for more than 25 years, and I am always looking for that next great lure the pike and smallmouths can't resist. The water we fish is impacted by moderate fishing pressure, and every year it seems like a lure that caught fish the year before isn't as effective. I don't know if the fish get accustomed to it or it's more about prey selection and environmental factors. I do know switching to a new lure often increases success.

But I learned a lesson on a trip years ago. Dad and I were fishing one evening when a young man who worked at the lodge began waving at us. He was in a boat fishing alone about 100 yards away, and we waved back and politely kept our distance. However, we

finally realized he was trying to get our attention because he had hooked a large musky and wanted help landing it. He'd never boated a musky.

I pulled alongside his boat and scooped the fish into my landing cradle, showed him how to hold it and we took some photos with his camera. After releasing it, he left immediately to show the pictures to his co-workers back at camp. As he motored away, Dad asked me if I noticed the lure he was using. It was the classic red and white spoon. "I haven't used one of those since we first started coming up here," Dad said. "I'm going to tie one on."

Dad proceeded to catch many pike over the next few days. and one of the largest muskies we've ever hooked broke his line, all on a red and white spoon. The next year the red and white spoon wasn't effective and we were back searching for the next "magic lure."

I will never quit looking for and buying new lures, but I every time I see a red and white spoon, I am reminded to try one of the oldies every once in a while.

KDWPT to the Rescue

Throughout recent dangerously cold temperatures and snow, several Kansas Department of Wildlife, Parks and Tourism (KDWPT) staff came to the aid of fellow Kansans who

found themselves in need of emergency assistance.

On Feb. 13. Seth Turner. El Dorado State Park manager, freed a man trapped in his camper on a day when windchills never topped 10 below zero. The man's furnace had run out of propane and his camper door had subsequently frozen shut. Turner even went so far as to help the man install a new propane tank and fix the door.

"It's really a regular part of our jobs, helping people," said Turner.

another rescue,

KDWPT game wardens safely retrieved "Oskie," a beloved family pet that had fallen through ice on the Kansas River. Another KDWPT game warden recently transported a bald eagle that had been injured in a crash to a professional wildlife rehabilitator. This was followed by a KDWPT Public Lands manager who assisted in rescuing and releasing a

> Canada goose whose feathers had become partially frozen to the downspout of a residential home.

> "From Law Enforcement to Public Lands and State Parks, our field staff are highly-trained and equipped to handle a variety of emergency situations," said KDWPT assistant secretary Mike Miller. "They're truly incredible at what they do, both on a day-to-day basis and in emergency situations, so we're very lucky and appreciative to have them."

To learn more about

employment with KDWPT, visit ksoutdoors.com/KDWPT-Info/Jobs or follow KDWPT on Facebook at www.facebook.com/kdwpt.





Writings from a Warden's Daughter

with Annie Campbell-Fischer

Swift Swan Justice

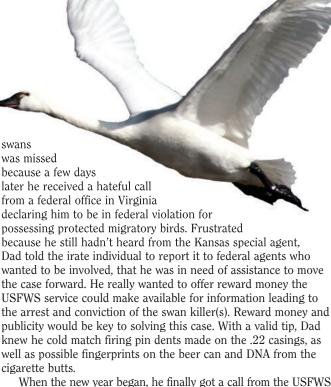
It was a Christmas morning in the early 1990s. Even though no one in the house was young enough to still believe in Santa, he had non-the-less left loot for my brother and me. He left Dad the flu bug. As he lay on the couch tucked under a blanket trying to stay warm, the phone rang. Dad was hoping it was one of my friends calling. but he slowly made his way to the phone when I told it him it was the Shawnee County Sherriff's office.

Even though Dad wasn't assigned Shawnee County, they had his number and dispatch relayed a report of dead trumpeter swans. The callers said they had been watching a group of swans on a watershed they owned and with relatives visiting for the holidays, they braved the bitter-cold winds to view the swans. However, they discovered the swans were gone. Searching with binoculars, the callers spotted two dead swans along the shoreline closest to the road. Distraught and angry they called the Shawnee County Sherriff's office. Trumpeter swans, nearly extinct in the 1930s, are making a comeback, but they were not common visitors at the time, so any sighting was noteworthy.

As sick as Dad was, he considered this call urgent, so he bundled up, chiseled the ice off his patrol truck and headed east some 35 miles. As the family told Dad the sad story, he felt just as heartsick as they were. At the watershed, Dad approached alone on foot to search for evidence. With the northwest wind and blowing snow stinging his face, Dad could see vehicle tracks that had swerved to the shoulder and he found and bagged several .22 shell casings, two cigarette butts, and an empty beer can. He then hiked out to the watershed carrying a heavy fishing rod rigged with treble hooks he'd brought to retrieve the swans from the icy water. He crossed a fence and walked 30 yards to the shore, where he found not two, but six dead trumpeters - two adults and four juveniles. Observers had reported a group of eight, so the poachers had nearly wiped out the entire flock. The rod and reel worked great retrieving the first swan, but he snagged up on the second cast. Without treble hooks, he needed his chest waders. His trip back required he slide under the barbed wire fence - straddling the fence wearing chest waders wasn't an option. Not knowing the water's depth, he eased slowly off the bank and took baby steps out to the swans, which were on the opposite side of the open water. Luckily, the water never got over waist deep and in three trips he'd brought all the birds back to the road.

Dad thanked the family for reporting crime and let them know he'd work to find the poachers. Who knows if being exposed to bone-chilling cold is a cure for the flu, but when Dad arrived home he didn't feel as sick as he'd had just four hours earlier. Maybe it was the adrenaline rush of the case and knowing he played vital role in the conservation of a species in need. With evidence secured in our garage nothing more could be done on Christmas day.

On the next day, which dawned sunny and bright, Dad attempted to report the case to the U.S. Fish and Wildlife Service's (USFWS) special agent assigned to his Kansas region. Swans are migratory birds and are protected under federal law. However, reaching anyone proved difficult during the holiday. He finally got an answer when he called the federal migratory bird office in Virginia to report he was in possession of the swans and provide the leg, wing-band and neck band numbers found on the swans. Apparently, the detail about how Dad came into possession of the



When the new year began, he finally got a call from the USFWS agent in Kansas and the wheels started turning. An editorial appeared in the Topeka Capitol newspaper about the slaughter of the swans and the USFWS offered a reward for information leading to a conviction. Then, the first and only break needed came through a phone call to the KDWPT regional office in Topeka. The caller had overheard one of his relatives bragging about "killing a bunch of big white birds" in west Shawnee County.

The game warden for Shawnee County called Dad for assistance and they arranged to meet the caller at a Wabaunsee County residence. When they arrived at the home, which was just a mile from the watershed lake, a man directed Dad and the warden to two teenagers sitting at the kitchen table.

During questioning, one of the scruffy teens said he "wasn't guilty of killing any of the swans because all the shots he fired skipped across the top of the car." He had stood outside the passenger's side of the car, shooting over the top. The other teen didn't say anything other than he and his friend were out on Christmas eve with nothing to do so they just drove around and did some shooting. After the two suspects were read their rights, they provided short written statements.

Amazingly, when Dad inspected an old passenger car sitting outside, he found 7 or 8 creases, each 8 to 10 inches long, across the car's top. Any of those bullets could have penetrated the car roof and struck the driver, and there would have been more than six dead swans. Dad and the other warden collected the two .22 rifles used in the crime, and advised the teens they would be hearing from the USFWS regional agent regarding federal charges. Their hand-written statements were added to Dad's written report.

Eventually the suspects were given court dates, but only one appeared for arraignment. The other fled to Arizona. Since this case was in federal court, the U.S. Marshall's office was called in Tucson. Marshalls located, arrested the 19-year-old, and escorted him back to Kansas. Eventually the swan killers were sentenced to time served and a couple thousand dollars in fines, forfeiture of the rifles, which weren't worth much, and put on probation. The swans were turned over to the USFWS and provided to state and federal agencies that had requested swans for display mounts. One of the swans hangs on the wall at the Great Plains Nature Center in Wichita.



One of my oldest and favorite recipes is for a pickled sausage commonly called "Hot Mommas." I featured this recipe in an article from the November/December 2006 issue, titled "Eat'n Wild." I was taught this recipe from an old friend, Jim Hlaus.

> And while it's one of my favorite, this recipe has always had a little bit of an issue for me: the texture from the lean deer meat and flavor intensity. That is, until, I made a discovery.

Earlier in the year, I discovered adding Knox unflavored gelatin to my summer sausage helped reduce the crumbly and dry texture; I decided to add this technique to my next batch of hot mammas.

Using four pounds of beef brisket fat trimmings, four pounds of pork butt, and and eight pounds of deer meat, this new 16-pound of hot mommas came out better than I had hoped. We'll call this recipe, "Hot Mommas, Version 2.0."

MEAT PREP:

16 lbs. Ground Meat (8 deer, 4 beef, 4 pork). Use whole pork butt, beef fat from brisket trimmings. Trim all fat off deer meat before grinding. If meat is pre-ground, use as is. Grind meat twice if softer texture is desired.

MEAT MIX DIRECTIONS:

Mix thoroughly 1/2 quart of hot water with Sure Cure mix in a small pitcher. Set aside. In large bucket or plastic container, layer meats together. (Just crumble meat into container so that the deer and beef look proportionate.) Sprinkle Colorado Spicy Jerky Mix on each layer for more consistent mixing. After all Mix is added, mix ingredients adding the Sure Cure mix solution. Let set in refrigerator overnight. Remix the next day. Add water as needed to soften the mix enough to use in sausage stuffer.



CASING PREPARATION AND SPECIFICATIONS:

Rinse natural hog casings inside and out thoroughly with warm water. Collagen casing (35mm) can be used. Clear color is recommended. Recommend against using fresh and smoke collagen because of blowouts using fresh and bad appearance of the smoke. DO NOT run water over collagen casings, this softens them and makes them more prone to blowouts.

MAKING THE SAUSAGE:

Using a sausage stuffer, fill casings and twist into links about a fist width long. Tie ends and fix blowouts with cotton string. Bring large pot of water to a rolling boil. Place sausage rings onto a wooden cane (a wooden cane is used for cooking to prevent scorching of casing while cooking). Submerge sausage in boiling water for exactly 11 minutes. Remove from water bloom (rapid cool) in ice water. Rupture any large water pockets that appear in sausages.

VINEGAR SOLUTION:

After sausages have completely cooled, cut sausages loops into individual sausages. Remove any strings. Fill a one-gallon jar with sausages, taking care not to pack too tight. Add 1 Tbs. Crushed Red Pepper and 1 Tbs. Whole Mustard Seed. Fill jar with White Vinegar. Make sure all sausages are covered with vinegar. Add 2 tsp. of Red Food Color to vinegar. Seal jar (with metal lids place Saran Wrap under lid to prevent rusting). Shake jar around to mix ingredients thoroughly and place on shelf.

NOTES:

Sausage can be eaten 24 hours after being pickled. Sausages can be placed in smaller jars to accommodate consumption rates. Adjust Vinegar solution and spices to jar size. Because sausages are pickled, no refrigeration is necessary. Best if eaten before eight months



Special Olympics Kansas at Kansas State Parks

Kansas state parks has partnered with the Special Olympics Kansas (SOKS) and the Sunflower Foundation to engage in outdoor activities

through the Special Olympics Outdoor Skills program. Last year, athletes visited Kansas state parks to complete fitness and outdoor learning sessions. The program is designed to help build communities of inclusion and encourage family members to become more active outside.

In the program, SOKS athletes learn new skills such as hiking, biking, fishing and recognition of native species and plants while completing fitness goals. State park managers, rangers and naturalists provide instruction in these skills. The goal is to increase overall activity for the athletes, learn new skills and become familiar with trails and parks in their area.

Lessons learned along with guided tours provide athletes with the confidence needed to become more active in areas that have been traditionally underutilized. It also allows family members to become more confident in participating in these activities with their athletes.

Athletes can track their exercise at the State Parks for the Unified Fitness Challenge. Once the reports are received, SOKS will recognize athletes at regional events for their participation in the program.

KDWPT staff hopes to see many more SOKS athletes in our state parks for years to come.



"WHATAMI?" answer: Paddlefish



Tis the Season for Jumping In

with Daren Riedle

I am writing this column in the middle of winter, where as a herpetologist the only thing I really have to look forward to are those first warm days of spring. But for all wildlife students out there, winter and early spring is time to start looking for seasonal work.

Many state agencies and other entities start their seasonal application process early. KDWPT opens their application process in November or December, which allows our field staff to snap up the cream of the crop before everyone else starts hiring. There is an old saying, "It's not what you know, it's who you know," and a healthy combination of both is required to getting started in this field.

As a hiring supervisor for seasonal techs, it is not uncommon to receive a stack of applicants that are virtually identical. As undergraduates, most students have very similar skill levels, which makes sorting through that stack of applicants a bit tedious. We are looking for anything that might make one applicant stand out above the rest. Do we recognize a name on the application? Has this applicant been exposed to a certain field technique that is applicable to the job you are hiring for?

KDWPT personnel as well as faculty and graduate students. Although my interest is in amphibians and reptiles, I helped with fish, mussel and small mammal projects. As an undergraduate in the wildlife field, it is your job to obtain as broad an education as possible. Getting to know the folks I volunteered for provided a pool of references that worked in my field of interest and were familiar with my work ethic. It also gave me a chance to quiz them about requirements for specific jobs within the agency.

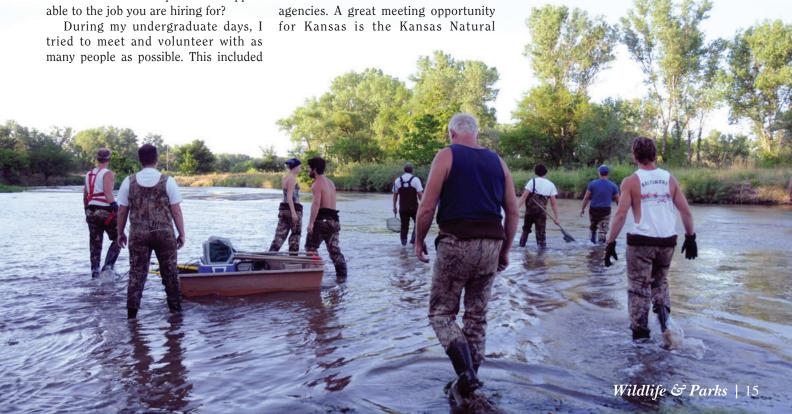
I grew up around Elk City Reservoir and got to know a few folks from there. When I was looking for my first summer job, I heard they were looking for a seasonal naturalist at Elk City. I submitted my application and called the hiring supervisor to let him know I was interested and had applied. The phone call lead to an interview, and ultimately the job. When applying for a position, don't be afraid to reach out and introduce yourself; it helps you stand out amongst all the other applicants and shows your interest in the position.

Another tip: attend conferences when you can, as they are a great place to meet folks from several state and federal agencies. A great meeting opportunity for Kansas is the Kansas Natural

Resource Conference, which meets every year, typically in January. When looking for seasonal employment, don't be afraid to leave the state. Sometimes working out of state provides a fresh new perspective on a variety of topics and ideas and introduces you to a whole new suite of colleagues and future references. My second seasonal position was sampling for alligator snapping turtles in southeastern Missouri. That one position led to me obtaining a graduate position at Oklahoma State University, which then led to my full-time position with the Arizona Game and Fish Department. That particular journey deserves its own column, perhaps in the next issue.

As far as where to start looking, be sure to check out individual state's fish and wildlife agency websites for job postings. The Texas A&M Department of Wildlife and Fisheries Sciences Job Board is another great resource. I have found several of my jobs, including my current one, through the A&M Job Board.

It is hard to outline everything you need to know in 500-600 words, but this advice should at least point you in the right direction.



Vature Votes: Pollinators

by Pam Martin, Education Specialist

In the world of pollinators, the introduced European honeybee is the most popular and gets all the fame, but the over 4,000 species of native North American bees are the real stars for flowering plants. Those tasty fruits and vegetables you like to eat are thanks to the pollination prowess of bees.

The saying, "busy as a bee," is true. From morning until night, bees make nests, care for young and find food. For flowering plants, bees' search for nectar and pollen to eat and feed young is their most important job. Carrying pollen from flower flower, bees help flowering plants pollinate, resulting in seed. They pollinate 80 percent of all flowering plants.

What would happen if bee numbers dropped dramatically, causing declines in fruit and vegetable production? Whole ecosystems, involving animals like rodents and birds, eating fruit and seed, and other animals like bobcats and fox eating them, would collapse. Not to mention our eating pleasure of blueberries, apples, melons, squash - the list is long. Bees are essential to the health of these systems.

Celebrity bees

Who are these rockin' bees that keep our ecosystems humming? Their size varies from the largest carpenter and bumble bees are just over an inch long – to the smallest with mining bees at .1 inch. Dressed like the stars they are, their exoskeletons flash shiny metallic purple and green, bright red, yellow, white or black colors. Sporting fancy 'dos unique to bees, their branched hairs located on their bodies at various points collect pollen as they visit flowers.

Good, good, good vibrations

Several types of native bees perform buzz pollination or sonication. Some plants, like tomatoes, peppers, cranberries and blueberries, tightly pack their pollen, making it difficult for pollinators to access. As bees vibrate their muscles super fast, pollen explodes from the flower, covering the bee in pollen.



BUMBLE



Of native bees, only bumble bees are truly social, meaning division of labor, multiple overlapping generations and multiple broods. After emerging in the spring, queens search out a nesting site, even evicting mice from burrows to begin a colony that may contain 50 to 500 bees. They also nest in trees and grass. Bumble bee queens overwinter underground, circulating an anti-freeze type liquid through their bodies to avoid freezing.





"Bee" a Helper Bee

Make this simple mason bee house to help female bees find places to lay their eggs!

You'll need:

- Old coffee mug
- Hollow plant stems or mason bee tubes cut in 4-inch lengths

K00

You can be as creative as you'd like with the coffee mug, using old ones from your cupboard, going to a second-hand store and each child picking out their own design, or stenciling plain white mugs. All kinds of stencils are available at craft stores, along with acrylic paints for glass/ceramics.

Head outside and collect old, dried plant stems that are hollow. Milkweed and

goldenrod have hollow stems. Bamboo will also work. Cut stems to 4 inches (no shorter than 3 inches). Or mason bee tubes may be purchased online; making sure the opening is 5/16 to 3/8 inches wide.

Place your bee house outside in early spring when the females emerge from hibernation. Position your bee house facing south, south east, at least 3 feet above ground - higher is better; mount securely. Placing them near flowering trees and plants will help the bee save energy finding nectar and pollen. Watch for activity and plugs in the stem ends, meaning a bee has chosen to lay her eggs in your house.

Replace with new stems or tubes each

It's a Wrap!

What could be better than using a bee product to help the Earth? Since beeswax is waterproof and non-toxic, has antibacterial properties, and stays soft at room temperature, it makes a great substitute for single-use plastic wrap when incorporated into fabric. Although other bees make and use wax for their brood cells, commercial beeswax is produced by European honey bees.

Scan the QR code for a video on how to make your own beeswax wraps. It's a great project for the entire family!



Scavenger Hunt

Make a beeline and find these items in your home, all possible thanks to pollination by bees.

	Canola	٥r	Sunflower	Oil
\Box	Cariola	UI	Sullilowel	OII

☐ Almonds

☐ Cough syrup with codeine

☐ Tomato

☐ Listerine mouthwash

(thymol is from plants)

☐ Cotton clothing

Linen cloth

Coffee

Applesauce

☐ Strawberry Jam

□ Wine

Vinegar

Peppers

☐ Any item with mint flavoring

(toothpaste, gum, etc.)

Sunflower Seeds

☐ Garlic in any form

Basil

☐ Squash (zucchini, yellow)

Chocolate

Orange Juice

Making no nest of their own, cuckoo bees parasitize other bees' nests. After successfully finding another bee's nest, the female cuckoo bee waits until the other bee leaves and enters to lay her own egg. Just like her namesake – the cukoo bird – her eggs hatch first, with the larva eating all the food, pupating and maturing before the host bee's egg hatches. It's a tough world out there.



MASON

90 percent of native bees live a solitary crevices, using plant fibers or mud to make rearing chambers for their young. An





Springtime is a busy time in the natural world and out of doors. Trees and wildflowers are growing new leaves and blossoms, hours of daylight are growing longer and longer, and renewal is plainly evident. The landscape changes from the frozen grip of winter to spring's outstretched arms seemingly in the blink of an eye.

With springtime and renewal comes the mating season of wild turkeys. A season of terrific battles, outlandish displays and turkey calling. Wild turkeys are incredibly social birds with an intricate social hierarchy, and a complex set of vocalizations. Communicating with one another utilizing a diverse set of sounds including yelps, clucks, purs, puts, cuts, and gobbles; springtime turkeys could seemingly be considered noisy.

It's these calls that turkeys utilize to communicate with each other that provides hunters a fantastic opportunity when it comes to interacting with turkeys in the spring. By recreating sounds "passable" as turkey vocalizations, it's possible to draw turkeys in close to investigate your calls. Working a tom turkey into a close distance and convincing him that your sounds originated from a hen turkey, then watching him gobble, strut, spit, and drum is an exhilarating experience.

There are a wide variety of turkey calls that hunters use during the hunt to produce convincing turkey sounds. Some calls rely on friction to produce sound, while others depend on the caller's mouth and lungs to produce sound. While many turkey hunters collect and utilize a variety of turkey calls, hunters can definitely be successful with a single call in their vest.

Producing turkey sounds that are realistic and consistent takes some skill and some practice, but with a little time spent manipulating a turkey call, you'll have toms gobbling in no time. Some factors to consider when selecting the turkey calls you plan to use this season include ease of use, size of the call, and the calls effectiveness when wet to name a few. Let's take a look at some of the calls turkey hunters take advantage of throughout the season.

FRICTION CAUS

Horseshoe Nail Call - This friction type call is used by pulling the sharp edge of a horseshoe nail, partially driven into a hollow wooden box, across a hard stone. The horseshoe nail call, like most friction calls, is extremely versatile, can produce a variety of turkey vocalizations and can be played loud or soft. Like many friction type -calls, this call takes two hands to operate. This call is a two-piece call.

Turkey Pot Call - Pot calls and strikers are incredibly popular among turkey hunters and are utilized for their ease of use, versatility, and variety. A small pot generally filled with slate, glass, or aluminum is held in one hand and a striker "peg" is held in the other. The peg, sometimes made of wood, carbon, or vinyl is worked across the pot to produce turkey vocalizations. The pot call is a two handed call and requires two pieces.

Push Pull Call - Arguably the simplest, and easiest turkey call to play, the push pull call is worked just as the name explains. The caller pushes or pulls a spring-loaded dowel back and forth. The dowel is fixed into a resonating box chamber and works a striker against a sound board producing turkey sounds. Push pull calls can easily be ran with a single hand, in fact, some are designed to mount onto the shotgun and operated by the pull of a string! Push pull calls are a single piece call.

Hox Call - Quite possibly the king of all the turkey calls, box calls are crafted in many sizes from all types of woods and have been incredibly popular for generations. Many a tom turkey has fallen to the sweet serenade of hen turkey sounds created by a box call. The general design includes an elongated wooden box that acts as the sound chamber while the box lid acts as the striker. Box calls are generally considered a two-handed type call, but can be operated with one hand in certain situations.

Mouth CAUS

Diaphragm Turkey Call - A truly hands-free played from inside the caller's mouth, in fact, diaphragm calls are often referred to as simply "mouth calls." A horseshoe shaped frame, generally constructed of aluminum, secures a stretched piece of latex that acts as a reed. The call sits in the top of the caller's mouth, held with the tongue with the reed facing forward. Air from the caller's lungs is exhaled and directed over the reed producing turkey vocalizations. Diaphragm calls are a one-piece call.

6 Wing Bone Turkey Call - Debatably the oldest turkey call design, wing bone turkey calls excavated at the Eva archaic site in Tennessee in 1940 were dated to 6500 BC. Wing bone calls are constructed, literally, from the bones that make up a turkey's wing. The wing bone call acts as a sort of sounding chamber that is played with a pucker and squeak or kissing of the lips. Air is drawn into the call producing a resonating hen turkey yelp. It is said that Captain Francis Marion, an American soldier during the revolutionary war in 1776, utilized a two bone wingbone yelper to communicate with his men during the battle.

7 Shock Call/Locator Call - Tom and jake turkeys will often gobble in response to a variety of sounds, especially in the springtime. The list of sounds that will make a turkey "shock" gobble is long and undefined. Sounds like thunder, coyote howls and other gobbles will often trigger a springtime tom to fire off a gobble whether he is on the ground or on the limb. This phenomenon allows hunters to use locator calls in an effort to trigger a tom's gobble from a distance and locate his general direction. Calls that simulate the caw of a crow or the hoot of an owl are ideal for locating a gobbler.



by Katie Hill, freelance writer

Wetlands Become "Field of Dreams" for Migratory Birds and Wheat Belt Farmers Alike



wild boar, deer with atypical antlers, John Brown's wild eyes in a reprint of John Steuart Curry's "Tragic Prelude," a life-sized model of a carnivorous dinosaur fossil, and the countless pelts, vintage license plates, windmill blades, Civil War-era sharpshooter rifles, and taxidermized prairie dogs that adorn the walls of the Ehmke office and guest house – which also happens to be a twostory grain silo.

But one of the Ehmkes' most prized possessions is a bird's-eye photograph of their property. At first glance, the patchwork quilt of winter wheat greens and rusty browns demarcated by dirt roads and fence lines could be anywhere in the Central Plains. But any farmer - or migratory bird would instantly notice the splotchy water stains littering the fields. These are called playa lakes, seasonal wetlands unique to the

region where the Midwest and the Southwest converge on the western side of the Central Flyway migratory corridor.

Many playa lakes and other wetlands in the Central Flyway have been drained, filled and burned over the last century, priming the land for crop production, but destroying crucial habitat for birds who migrate through the region twice a year. But a growing number of farmers in Kansas and Nebraska are getting paid to restore playa lakes, shallow wetlands and native grasses to their fields, creating much-needed stopover habitat for weary avian travelers in the process. Many farmers would spit at wasting potential crop acreage like this; but, thanks to easement opportunities with conservation organizations and a specific type of Conservation Reserve Program administered by the Farm Service Agency, wetlands have officially become a hot agricultural commodity.

"We want the birds to benefit, but we also need to benefit ourselves to make it worthwhile," said Louise Ehmke. "It is cliché, but it really is a win-win."

MIGRATION JOURNEYS

Migrations are daunting journeys, and some species need all the help they can get along the way. Just ask the world's last wild

migratory whooping cranes, 504 strong after the population dipped to just 16 birds in 1941.

Or, better yet, ask Andrew Caven, director of conservation research at The Crane Trust in Wood River, Nebraska.

Last year, Caven led a study on how habitat characteristics impact the amount of time whooping cranes stay at their stopover locations. He noticed a trend of longer stopovers in the wetland-heavy Prairie Pothole region of southern Saskatchewan and the Dakotas and significantly shorter ones south of Nebraska's Platte River Valley, where wetlands become scarcer.

"Stay lengths were longest at natural permanent and natural temporary wetlands," the paper reads. Understandably so – wetlands in the Midwest serve up a smorgasbord of bugs, amphibians, small fish, grains, and fresh water to power migratory birds through their journeys.

"With a whooping crane, or a duck, or a large-bodied waterbird, they stay longer where the getting's good, because they have evolved to cross large tracts of inhospitable terrain," Caven said.

Large tracts, indeed. The whooping crane's migration is 2,500 miles long, from Wood Buffalo National Park in the Northwest Territories to Aransas National Wildlife Refuge on the Texas Gulf Coast. Connectivity of stopover habitat between the two is critical, something Caven likens to rungs on a ladder.

"You pull out one rung, you can still climb. You pull out three in a row, it's getting risky," said Caven. "We need some solid rungs on the ladder...rungs that birds can sit and stand on to rest and build up resources."

MIGRATORY BIRD JOINT VENTURES

A continent-wide series of regional task forces known as Migratory Bird Joint Ventures were created by the U.S. Fish and Wildlife Service's North American Waterfowl Management Plan in 1986. These collaborative conservation groups, comprised of organizations like the Crane Trust and Ducks Unlimited, are adding rungs to the ladder by creating opportunities for farmers and landowners to enter land into conservation easements.

Mel Taylor, a lifelong conservation-obsessed farmer and board member of the Rainwater Basin Joint Venture, witnessed his easement at work with his own two eves.

Well, technically, he witnessed a cell phone picture of his easement at work. His neighbor was the one who saw the evidence, a single whooping crane eating and resting on his property in Fillmore, Nebraska in April 2019.

With something between sheepishness and quiet pride in his voice, Taylor explained that he wasn't an average farmer. His extensive background in wildlife biology has primed him to manage conservation easements and wetland restoration projects. While others continue to plant monocultures on their land, Taylor opts for seasonal standing water and native grasses on parts of his.

"Everyone is always thinking 'corn and soybeans,' and this is definitely not a 'corn and soybeans' type of farm," said Taylor of the marshy plot. "I went to the public auction and bought it, and right away I called Ducks Unlimited.

Ducks Unlimited assessed the property and put it under easement quickly. But the work had only just begun. Taylor started planting a bird-friendly, grain-heavy mix on the wetland like a dinner host laying out a four-course buffet. Ducks Unlimited and other partners built levees, buffers and complex diversion systems to help restore the land's natural hydrology. Just like that, the migratory ladder had a new rung.

"It requires a lot of upkeep," said Taylor, looking out over the successful explosions of native grasses from behind the steering wheel of his shiny red pickup truck. "I don't think these kinds of programs are for the landowners who don't want to do the work."

CP3RR

The landowners aren't the only ones doing the work. Abe Lollar, a biologist for Ducks Unlimited, drives all over central and west Kansas convincing landowners to enter their playa wetlands into what is commonly known as a "CP38B."

No, not the polite bronze robot from Star Wars.

"CP38B" is the very necessary short title for the USDA's Migratory Bird, Butterfly, and Pollinator Habitat program under the State Acres For Wildlife Enhancement initiative. Like the multitude of other Conservation Reserve Programs (CRP), the Farm Service Agency pays farmers to take environmentally sensitive land out of crop production and plant species that conserve soil health, wildlife habitat and water quality instead. The CP38B option differs from other CRP agreements by involving more nutrient-dense, bird- and pollinatorfriendly plant species.

In Dighton and elsewhere in Lane County, Lollar says the CP38B program is an easy sell.

"I fell in love with Lane County

my first year out here because it's covered in water and I saw ducks everywhere. I made it a focus to get these landowners involved in these restoration projects and protection programs," said Lollar. "We've seen a huge influx of interest. In Lane County, people are conservationminded...it's very refreshing."

Some also consider CP38B more farmer-friendly. While other standard CRP payouts range from \$30 to \$80 per acre annually, which can be financially unfeasible for many farmers, CP38B payouts are determined through a reverse bidding system that allows farmers more say in what their protected land is worth. This detail usually headlines Lollar's sales pitch when he talks to landowners.

"I try to hit on four main points: wildlife, water conservation, water quality and financial gain," said Lollar. "Most of the time, after putting these playa lakes into conservation programs, landowners will quickly find out they are gaining financially...they see the benefits, then their neighbors see the benefits, and word spreads."

For Dighton resident and landowner Logan Campbell, the decision to enter his playas into a CP38B was a sound one, both environmentally and economically.

"You're getting the groundwater regeneration, the conservation for wildlife, but from a landowner's standpoint, it still has to be an economic decision," said Campbell. "With the standard CRP rate at \$35 an acre, that's not a decision a farmer or landowner can get behind. They're generating more money by farming that land, even if it's flooding out."

Playas, also known as buffalo wallows and mud holes, are notorious for taking farm implements hostage in their mucky grasp, even if they've been drained and planted with crops. But by taking 80 acres of playas plus expansive buffer zones out of production, Campbell and his







John Deere in the process.

family. If I can accomplish those two restored wetland. things at the same time through the every one we have.

FIELD OF DREAMS

Refuge and Cheyenne Bottoms other ducks, geese, and sandhill a story or two.

tenant farmers can pull money out Wildlife Area in the central part of cranes that already visit. of the mud without sacrificing a the state, and few make it as far west as the playa lakes region. This means the old saying is true," said Lollar. "My hope is that I can be a good that farmers in Lane County have "If you build it, they really will steward of the ground while still yet to get as lucky as Mel Taylor to come." making economic decisions for my knowingly host one on their

playa program, that's a no brainer white endangered birds works for thanks to the Wheat Belt's growing for me...I'm going to try to enroll hundreds of thousands of other population of farming conservationspecies, too. If the whooping crane ists and the various programs population continues to grow at its enabling their wetland restorations. current exponential rate, some When whooping cranes fly wayward whoopers will likely resting in the Ehmkes' prized 125through Kansas, a majority of them need to touch down in Lane acre playa, Vance and Louise might stop in Quivira National Wildlife County with the innumerable even bring them coffee and tell them

"With these restored wetlands,

When that day arrives, they will have plenty of sturdy rungs on the But what works for the 504 tall migratory ladder to choose from,

And if the cranes find themselves

"FISH ON US" FOR FREE JUNE 5 AND 6!

FREE FISHING DAYS

The Kansas Department of Wildlife, Parks and Tourism invites you and your family to get outdoors by visiting our public fishing waters and enjoy free fishing on June 5 and 6! While other fishing regulations apply, such as length and creel limits, anglers can enjoy fishing public waters without a license during this annual two-day event.

For more details, call your local state park office or check it out online at: www.ksoutdoors.com.



2021

The information is formulated from data collected by fisheries management biologists through their annual lake monitoring activities (which include test netting and electroshocking). Not every lake is sampled each year, so a three-year average has been included. Some lesser-rated waters are not included in the tables.

The data is separated into three categories - reservoirs (those larger than 1,200 acres), lakes (waters from 10 to 1,200 acres), and ponds (waters smaller than 10 acres) because sampling on small water bodies may not be comparable with that on larger areas.

Tables have been created for popular species and include a **Density Rating, Preferred Rating,** Lunker Rating. Biggest Fish. Biologist's Rating, and 3-year Average.

Species reports are bluegill, channel catfish, largemouth bass, spotted bass, walleye, white bass, white crappie, black crappie, wiper, sauger, saugeye, smallmouth bass, striped bass, redear sunfish, blue catfish, flathead catfish.

DENSITY RATING

The Density Rating is the number of fish that were high-quality size or larger sampled per unit of sampling effort. High-quality size, listed in parentheses at the top of the Density Rating column, is the length of fish considered acceptable to most anglers and is different for each species The higher the Density Rating, the more high-quality sized or larger fish per surface acre in the lake. Theoretically, a lake with a Density Rating of 30 has twice as many high-quality sized fish per acre as a lake with a Density Rating of 15.

LUNKER RATING

The Lunker Rating is similar to the Density Rating, but it tells you the relative density of lunker-sized fish in the lake. A lunker is a certain length of fish considered a trophy by most anglers. It also differs with each species and is listed in parentheses at the top of the Lunker Rating column. For example, most anglers consider a channel catfish longer than 28 inches a lunker. Many lakes may have a lunker rating of o, but this does not mean there are no big fish in that lake. It just means that no lunker fish were caught during sampling, and they may be less abundant than in lakes with positive Lunker Ratings..

You can use the Density Rating and Lunker Rating together. If you want numbers, go with the highest Density Rating. If you want only big fish, go with the Lunker Rating. Somewhere in the middle might be a better choice. A lake with a respectable rating in all three categories will provide the best overall fishing opportunities.



PREFERRED RATING

The Preferred Rating identifies how many above-average-sized fish a water contains. For example, a lake may have a good density of crappie, but few fish over 10 inches. The Preferred Rating tells which lake to go to for a chance to catch bigger fish.

BIGGEST FISH

The Biggest Fish column lists the weight of the largest fish caught during sampling. A heavy fish listed here can give the lunker fishermen confidence that truly big fish are present.

BIOLOGIST'S RATING

The Biologist's Rating adds a human touch to the forecast. Each district fisheries biologist reviews the data from annual sampling of their assigned lakes. This review considers environmental conditions that may have affected the sampling. They also consider previous years' data. A rating of P (poor), F (fair), G (good), or E (excellent) will be in the last column. Sometimes the Density Rating may not agree with the Biologist's Rating. This will happen occasionally and means the Density Rating may not accurately reflect the biologist's opinion of the fishery.

SMALLMOUTH BASS	(2) DENSITY	PREFERRED RATING	("05<)	BIGGEST FISH	3-YEAR AVERAGE	BIOLOGIST
RESERVOIRS	(212)	(>10)	(720)	103	(712)	
Glen Elder Reservoir	32.87	20.24	5.19	4.14	30.61	Good
El Dorado Reservoir	17.06	8.24	1.18	2.93	14.71	Fair
Wolf Creek Reservoir	16.92	14.62	5.38	3.84	21.13	Fair
Wilson Reservoir	11.30	6.97	1.08	4.27	8.78	Good
Melvern Reservoir Milford Reservoir	7.65 5.73	3.92	1.57	3.69 2.71	12.55	Good
Big Hill Reservoir	4.20	1.68	0.00	1.72	2.62	Fair
Perry Reservoir	2.27	0.57	0.57	3.42	6.14	Fair
Clinton Reservoir	1.82	0.97	0.24	3.42	1.88	Fair
Cedar Bluff Reservoir	0.13	0.00	0.00	1.00	0.54	Fair
LAKES						
Great Bend-Stone Park Lake	7.04	0.00	0.00	1.06	2.75	Fair
Winfield City Lake	5.15	3.68	0.74	2.68	5.46	Fair
Pottawatomie SFL #2	3.61	1.20	0.00	1.29	4.12	Fair
Jeffrey EC Make Up Lake	2.00	2.00	1.00	1.77	5.24	Fair
Holton - Banner Creek Lake	1.86	0.65	0.00	4.01 1.94	0.65	Fair Fair
Shawnee County-Lake Shawnee Geary SFL	0.98	0.63	0.00	1.98	0.63	Poor
Jewell SFL	0.59	0.59	0.00	2.44	0.71	Poor
Douglas County-Lonestar Lake	0.00	0.00	0.00	0.32	0.00	Poor
Wilson Reservoir Glen Elder Reservoir LAKES Great Bend-Stone Park Lake SPOTTED	0.00 0.04	0.27 0.00 0.00	0.00	13.56 7.13 0.32	1.39 0.03 0.00	Poor Poor
BASS						
El Dorado Reservoir	4.71	1.76	0.00	1.98	2.65	Poor
Cedar Bluff Reservoir	2.67	0.76	0.00	1.97	3.10	Good
Sebelius Reservoir	1.18	0.59	0.00	1.82	4.85	Good
Toronto Reservoir	0.65	0.65	0.00	2.43	0.65	Poor
Glen Elder Reservoir	0.35	0.17	0.00	1.84	0.43	Poor
Wilson Reservoir Milford Reservoir	0.15	0.00	0.00	0.71	0.29	Poor
Melvern Reservoir	0.00	0.00	0.00	0.00	0.00	Poor
LAKES						
Wilson SFL	25.88	12.35	0.00	1.94	20.20	Good
Bourbon SFL	12.75	0.98	0.00	1.18	20.97	Good
Council Grove City Lake	4.90	0.98	0.00	1.21	4.21	Fair
Winfield City Lake	2.21	0.00	0.00	0.86	1.53	Poor
Eureka City Lake Garnett - Cedar Creek Lake	1.96 0.52	0.98 0.52	0.00	1.38	1.54	Poor
Howard - Polk Daniels Lake	0.00	0.00	0.00	0.36	1.48	Poor
SAUGER						
RESERVOIRS						
Perry Reservoir	3.91	0.65	0.22	2.31	2.24	Excellen
Clinton Reservoir	1.38	0.88	0.13	1.83	1.10	Fair
Melvern Reservoir	0.65	0.35	0.10	1.94	0.30	Poor
LAKE						
Holton - Banner Creek Lake	1.13	0.38	0.00	1.20	1.71	Good

BLUE	Ès	PREFERRED Rating	NG EN	EST	AGE	DGIST
CATFISH	DENSITY	ZATII	RATE	BIGGEST	NER VER	A E
CAILIOU	(>12")	(>15")	(>20")	lbs	(>12")	
RESERVOIRS	7.7					
Milford Reservoir Wolf Creek Reservoir	3.20 2.25	0.35	0.15	29.30 28.06	2.60 1.94	Excellent Good
Tuttle Creek Reservoir	0.80	0.25	0.00	15.98	0.80	Fair
Elk City Reservoir	0.75	0.08	0.00	20.14	1.28	Fair
Lovewell Reservoir El Dorado Reservoir	0.65	0.05	0.00	18.24 8.09	0.79	Fair Good
John Redmond Reservoir	0.57	0.00	0.00	9.96	0.34	Fair
LaCygne Reservoir	0.57	0.07	0.00	12.78	0.38	Fair
Clinton Reservoir Kanopolis Reservoir	0.38	0.13	0.00	20.50 3.71	0.56	Fair Fair
Wilson Reservoir	0.33	0.17	0.00	13.75	0.26	Good
Melvern Reservoir	0.25	0.15	0.00	20.65	0.17	Fair
Perry Reservoir Glen Elder Reservoir	0.13	0.04	0.04	3.94 7.41	0.24	Fair Fair
Cheney Reservoir	0.04	0.04	0.04	26.46	0.04	Fair
LAKES						
Yates Center City Lake-New	0.33	0.00	0.00	6.72	0.78	Poor
Jeffrey EC Make Up Lake	0.00	0.00	0.00	1.46	0.00	Poor
CHANNEL CATFISH						
RESERVOIRS Marion Reservoir	6.73	0.13	0.00	4.72	4.13	Excellent
Hillsdale Reservoir	6.67	0.08	0.08	10.63	4.75	Excellent
Toronto Reservoir	6.08	3.08	0.50	12.79	3.55	Excellent
Kanopolis Reservoir	4.76 4.60	0.67	0.00	6.39 8.52	4.38 5.87	Good Good
Big Hill Reservoir Lovewell Reservoir	4.25	0.90	0.15	13.84	5.67	Good
Elk City Reservoir	3.83	0.83	0.08	8.43	2.86	Good
Clinton Reservoir	3.56 2.83	0.00	0.00	4.89 7.25	3.21 2.92	Good Good
Wilson Reservoir Perry Reservoir	2.70	0.57	0.04	8.42	1.73	Good
Melvern Reservoir	2.30	0.20	0.10	11.46	3.16	Good
Pomona Reservoir	2.00	0.14	0.00	8.00 10.85	1.26	Good Good
Cheney Reservoir Fall River Reservoir	2.00	1.33	0.33	10.54	2.17	Good
LaCygne Reservoir	1.93	0.00	0.00	3.94	1.37	Good
Kirwin Reservoir	1.58 1.29	0.33	0.00	7.66 5.86	1.24 0.94	Good Fair
Council Grove Reservoir Glen Elder Reservoir	1.04	0.42	0.13	14.97	1.78	Fair
John Redmond Reservoir	0.95	0.19	0.14	14.03	0.98	Fair
El Dorado Reservoir	0.80	0.07	0.00	5.40 4.17	0.49	Fair Fair
Wolf Creek Reservoir Webster Reservoir	0.75	0.00	0.00	3.84	1.14	Good
Cedar Bluff Reservoir	0.58	0.04	0.04	10.64	0.35	Fair
Milford Reservoir	0.40	0.00	0.00	2.79 7.33	0.45	Fair Fair
Tuttle Creek Reservoir Sebelius Reservoir	0.00	0.00	0.00	1.06	0.13	Fair
LAKES		72.57		1.025		
Plainville Lake Garnett-Cedar Creek Lake	12.75	2.25 0.38	0.00	6.59 5.75	12.50 9.42	Excellent Excellent
Pleasanton West Lake	9.33	0.00	0.00	3.94	11.67	Excellent
Neosho SFL	9.25	0.25	0.00	3.88	5.92	Good
Parsons City Lake Woodson SFL	9.13 7.00	0.75	0.13	13.10 3.21	9.13 7.00	Good
Mound City Lake	6.83	1.67	0.00	6.68	6.00	Good
Sabetha City Lake	6.67	0.17	0.00	4.99	6.00	Good
Eureka City Lake	6.50	1.67	0.17	8.42 5.24	6.50	Good
Anthony City Lake Olathe - Cedar Lake	6.00	0.00	0.00	4.93	5.58	Good Good
Rooks State Lake	6.00	0.00	0.00	3.29	5.92	Good
Sedan New City Lake - South	5.25	1.00	0.00	7.28	3.50	Good
Sedan Old City Lake - North Jetmore City Lake	4.75 4.67	0.50	0.00	7.48 5.07	3.75 2.83	Good
Atchison City Lake #23	4.33	0.33	0.00	6.97	4.33	Good
Washington SFL	4.25	1.25	0.25	9.79	3.25	Good
Fort Scott City Lake	3.86	0.71	0.14	9.30	3.30	Good

CHANNEL	TING	PREFERRED	LUNKER	BIGGEST	3-YEAR AVERAGE	LOGIST
CATFISH	(>12")	(>15")	(>20")	lbs	(>12°)	B A
LAKES	(212)	(>10)	(20)	103	(212)	
Coldwater Lake	3.80	0.00	0.00	5.62	4.82	Good
Holton – Banner Creek Lake Fort Scott Gunn Park W Pond #2	3.75 3.33	0.50	0.13	12.30	2.96 3.33	Good
Paola City Lake – Lake Miola	3.17	0.33	0.00	4.73	2.11	Good
Douglas SFL	3.17	0.33	0.00	6.32	4.61	Good
Horton-Mission Lake	2.67	0.00	0.00	3.85	5.42	Good
Wichita-Chisholm North Lake	2.60	0.00	0.00	6.03	2.60	Fair
Harvey County Lake-East Marion County Lake	2.56 2.50	1.00	0.00	6.37 6.11	1.98 3.63	Good
Jewell SFL	2.50	0.25	0.00	6.86	3.25	Good
Shawnee State Fishing Lake	2.50	0.17	0.00	4.96	2.72	Good
Wellington City Lake	2.50	0.00	0.00	2.13	1.11	Good
Council Grove City Lake	2.40	0.20	0.20	11.66	5.07	Good
Centralia City Lake	2.38	0.00	0.00	4.19	1.88	Good
Garnett City Lake-North Jeffrey EC Make Up Lake	2.25	0.25	0.00	6.66	2.71	Good
Middle Creek SFL	2.17	0.00	0.00	2.62	2.39	Fair
Lyon SFL	2.17	0.50	0.00	6.76	3.22	Good
Carbondale City Lake - East	2.17	0.00	0.00	4.05	3.83	Fair
Olathe - Lake Olathe	2.17	0.33	0.00	9.00	1.33	Good
Barber SFL – Lower Leavenworth SFL	1.67	0.00	0.00	2.54 4.78	1.33	Fair Fair
KDOT W. Borrow Pit (Wichita)	1.67	0.33	0.00	7.56	1.67	Good
Gardner City Lake	1.50	0.33	0.00	5.44	2.92	Fair
Yates Center City Lake-New	1.50	0.17	0.17	15.54	2.39	Good
Howard-Polk Daniels Lake	1.50	0.75	0.00	5.37	9.17	Good
Bone Creek Lake	1.38	0.38	0.00	7.03	1.50	Good
Logan City Lake Sedgwick County-Lake Afton	1.33	0.33	0.00	5.08	1.14	Fair Good
Pleasanton East Lake	1.33	0.50	0.50	11.66	1.50	Good
Mcpherson SFL	1.20	0.10	0.00	6.68	1.63	Fair
Harvey County Lake-West	1.20	0.00	0.00	4.03	0.60	Fair
Montgomery SFL	1.17	0.17	0.00	6.89	3.39	Fair
Miami SFL	1.17	0.00	0.00	2.27	1.06	Fair
Wilson SFL	1.17	0.17	0.00	5.72	0.94 1.78	Good Fair
Gridley City Lake Geary SFL	1.00	0.00	0.00	3.73	1.83	Fair
Garnett City Lake-South	1.00	0.00	0.00	3.02	1.83	Fair
Louisburg City Lake	1.00	0.00	0.00	3.41	1.00	Fair
Lenexa Lake - Lenexa	1.00	0.00	0.00	2.10	1.11	Fair
Wichita-South Lake	1.00	0.00	0.00	2.49	1.00	Fair
Bourbon SFL Scott SFL	1.00	0.00	0.00	3.45 5.42	3.17 0.44	Fair Good
Sabetha - Pony Creek Lake	1.00	0.33	0.33	12.68	1.17	Fair
Brown SFL	0.83	0.17	0.00	6.83	2.93	Fair
Yates Center-South Owl Lake	0.83	0.33	0.00	7.14	1.56	Fair
Clark SFL	0.80	0.00	0.00	2.37	1.90	Good
Graham Co-Antelope Lake	0.75	0.00	0.00	3.94	2.17	Good
Moline Old City Lake - South Lebo City Lake	0.75	0.00	0.00	3.04 6.61	1.08	Poor Fair
Pottawatomie SFL #2	0.75	0.00	0.00	2.75	2.75	Good
Alma City Lake	0.75	0.00	0.00	3.67	1.04	Fair
Meade SFL	0.67	0.00	0.00	3.97	0.22	Fair
Moline New City Lake - North	0.67	0.00	0.00	4.76	1.22	Fair
Kingman SFL	0.67	0.00	0.00	2.24	3.73	Fair
Crawford SFL Madison City Lake	0.50	0.00	0.00	3.61 5.73	0.72	Good Good
Ellis City Lake	0.50	0.00	0.00	1.83	0.58	Fair
Belleville - Rocky Pond	0.50	0.00	0.00	1.58	0.17	Good
Cowley SFL	0.50	0.25	0.00	1.85	2.75	Good
Ottawa SFL	0.50	0.00	0.00	2.16	0.83	Good
Nebo SFL	0.33	0.00	0.00	2.14	2.94	Fair
Jeffrey EC Make Up Lake Butler SFL	0.33	0.00	0.00	2.62	0.72 3.42	Fair Good
Sheridan SFL	0.25	0.00	0.00	1.40	0.17	Fair
Olpe City Lake	0.25	0.00	0.00	3.43	0.25	Fair
Horsethief Reservoir	0.20	0.00	0.00	1.96	0.23	Good
Herington City Lake-New	0.20	0.00	0.00	1.59	0.40	Poor
Great Bend-Stone Park Lake	0.00	0.00	0.00	1.14	0.50	Fair
Lacrosse-Warren Stone Lake	0.00	0.00	0.00	0.35	0.00	Fair
Atwood - Lake Atwood - Main Pottawatomie SFL #1	0.00	0.00	0.00	0.65	0.11	Fair Poor
- Ottomatoring SEE #1	0.00	0.00	0.00	0.07	0.00	1.001

CHANNEL CATFISH	(,713) DENSITY	PREFERRED RATING	(,05<) RATING	BIGGEST FISH	3-YEAR	BIOLOGIST
PONDS				7	fish.	
Jewell City Lake - Emerson Lake	5.50	1.00	0.00	5.60	5.17	Good
KDOT- E. Borrow Pit (Wichita)	1.50 0.25	0.00	0.00	1.75	1.50 0.83	Fair Poor
Sterling City Lake Atchison City Lake #7	0.00	0.00	0.00	1.16	0.00	Poor
Severy City Lake	0.00	0.00	0.00	0.61	1.22	Poor
WALLEYE						
RESERVOIRS						
Wilson Reservoir	8.70	3.97	0.70	8.53	6.72	Good
Cedar Bluff Reservoir	4.04	0.54	0.00	4.37	4.00	Good
Kirwin Reservoir	2.92	0.67	0.25	7.47	2.97	Good
Milford Reservoir	2.60	0.45	0.05	6.18	2.05	Good
El Dorado Reservoir Marion Reservoir	2.53	1.40 0.07	0.13	6.89 3.33	1.73	Good
Glen Elder Reservoir	2.40	0.42	0.00	5.04	3.15	Good
Webster Reservoir	1.83	0.58	0.17	6.60	1.97	Good
Cheney Reservoir	1.70	1.19	0.11	6.74	1.31	Fair
Lovewell Reservoir	1.15	0.30	0.05	8.17	0.83	Fair
Wolf Creek Reservoir	0.70	0.30	0.00	5.19	0.53	Fair
Melvern Reservoir	0.45	0.10	0.00	4.59	0.65	Fair
Clinton Reservoir	0.38	0.00	0.00	2.17	0.19	Fair
Hillsdale Reservoir	0.33	0.08	0.00	4.85	0.42	Good
Pomona Reservoir	0.29	0.14	0.00	4.58	0.18	Fair
Council Grove Reservoir	0.07	0.07	0.00	2.80	0.17	Poor
Perry Reservoir	0.04	0.00	0.00	1.34	0.04	Poor
Big Hill Reservoir	0.00	0.00	0.00	0.97	0.00	Poor
Kanopolis Reservoir	0.00	0.00	0.00	0.13	0.00	Fair
LAKES Barber SFL - Lower	2.67	0.33	0.00	4.41	1.89	Good
Gridley City Lake	2.00	0.67	0.00	4.18	2.44	Good
Sabetha - Pony Creek Lake	1.33	0.83	0.17	6.33	1.33	Good
Fort Scott City Lake	1.00	0.00	0.00	1.44	0.50	Fair
Jeffrey EC Make Up Lake	1.00	0.33	0.00	5.25	1.28	Fair
Holton - Banner Creek Lake	1.00	0.38	0.13	5.96	0.88	Good
Clark SFL	0.80	0.00	0.00	1.64	1.07	Good
Horsethief Reservoir	0.80	0.60	0.00	5.02	1.22	Good
Bourbon SFL	0.67	0.33	0.00	3.63	0.46	Good
Leavenworth SFL	0.33	0.17	0.00	3.00	0.44	Poor
Yates Center-South Owl Lake	0.33	0.33	0.17	6.73	0.61	Fair
Jeffrey EC Make Up Lake	0.25	0.00	0.00	1.53	0.33	Fair
Herington City Lake-New	0.20	0.20	0.00	3.31	0.97	Poor
Council Grove City Lake	0.20	0.20	0.00	4.77	0.45	Poor
Pleasanton East Lake	0.17	0.00	0.00	1.04	0.17	Poor
Yates Center City Lake-New Woodson SFL	0.17	0.00	0.00	1.20 0.64	0.11	Poor Poor
LARGEMOUTH BASS						
RESERVOIRS Sebelius Reservoir	91.18	32.35	0.00	4.32	67.56	Good
Webster Reservoir	73.53	21.18	0.00	3.99	40.74	Good
Wilson Reservoir	72.76	42.88	1.24	5.78	43.35	Good
LaCygne Reservoir	55.42	33.13	6.02	6.49		Excelle
Big Hill Reservoir	50.42	23.53	2.52	5.44	30.40	Good
Kirwin Reservoir	42.35	34.71	0.00	2.92	32.39	Good
Toronto Reservoir	9.80	5.23	0.00	3.53	9.80	Poor
Glen Elder Reservoir	9.00	5.19	0.17	5.38	15.50	Good
El Dorado Reservoir	6.47	2.94	0.00	3.04	6.76	Fair
123 1200123	6.34	1.46	0.00	3.78	9.80	Poor
Kanopolis Reservoir						
Melvern Reservoir	5.10	1.37	0.00	2.69	7.29	Fair
Melvern Reservoir Cedar Bluff Reservoir	5.10 4.57	3.56	0.00	3.98	6.46	Good
Melvern Reservoir	5.10					Fair Good Fair Fair

LARGEMOUTH BASS	DENSITY	PREFERRED Rating	LUNKER	BIGGEST FISH	3-YEAR AVERAGE	BIOLOGIST
DAGG	(>12")	(>15")	(>20")	lbs	(>12")	
RESERVOIRS						
Wolf Creek Reservoir	3.85	3.85	0.00	3.04	13.08	Fair
Perry Reservoir	2.84 1.24	1.24	0.00	5.48	8.30 1.24	Fair
Lovewell Reservoir	1.24	1.24	0.00	4.15	1.24	Poor
Ford SFL	260.00	42.86	0.00	4.63	115.22	Good
Cowley SFL	189.41	56.47	1.18	4.32	180.78	Good
Butler SFL	172.63	106.32	8.42	7.03	184.01	
Garnett City Lake-South	151.61	70.97	1.61	4.82	165.18	Good
Fort Scott Gunn Park W Pond #2	146.15	42.31	0.00	3.62	90.59	
Garnett City Lake-North	118.10	41.90	0.00	3.86	117.47	Good
Lyon State Fishing Lake	111.76	17.65 22.35	0.00	3.86 5.88	99.41	Good
Montgomery SFL Jewell SFL	104.71	74.12	1.76	5.42	54.35 86.25	Good
Wilson SFL	101.76	48.24	1.76	6.16	95.49	Good
Meade SFL	95.74	68.09	2.13	5.20	88.66	Good
Sabetha - Pony Creek Lake	88.98	65.35	0.00	3.91	114.85	Good
Mcpherson SFL	86.78	42.15	3.31	5.42	80.79	Good
Lenexa Lake - Lenexa	84.62	14.42	0.96	4.82	102.24	Good
Douglas SFL	83.65	7.69	0.00	1.98	75.60	Good
Brown SFL	77.94	69.12	7.35	6.59	86.03	Good
Leavenworth SFL	73.53	2.94	0.00	2.03	52.87	Good Good
Yates Center City Lake-New Great Bend-Stone Park Lake	73.13 71.83	10.00	0.00	3.67 1.90	79.81 59.34	Fair
Gardner City Lake	67.31	21.15	2.88	5.72	65.29	Good
Alma City Lake	66.98	17.92	0.00	4.77	115.44	Good
Gridley City Lake	66.67	24.39	0.00	4.17	110.00	Good
Douglas County-Lonestar Lake	56.86	13.73	0.00	3.80	52.29	Good
Shawnee SFL	56.44	23.76	1.98	5.77	65.81	Good
Atchison SFL	55.38	27.69	1.54	4.57	66.37	Good
Rooks State Lake	54.12	14.12	0.00	5.51	65.31	Good
Shawnee County-Lake Shawnee	50.98	17.65 9.80	0.65	4.77 2.35	58.82	Good
Carbondale City Lake - East Graham Co-Antelope Lake	49.02 47.75	32.43	0.00	3.57	64.05 34.01	Good
Horton-Mission Lake	46.08	29.41	7.84	5.58	49.43	Good
Scott SFL	46.03	13.97	0.00	3.42	43.66	Good
Olathe - Cedar Lake	45.10	24.51	1.96	5.36	43.90	Good
Washington SFL	44.09	31.18	0.00	3.43	50.40	Good
Great Bend-Vets Park Lake	42.31	7.69	1.92	5.37	42.26	Good
Howard-Polk Daniels Lake	41.18	24.51	0.00	4.52	42.85	Good
Sheridan State Fishing Lake Pottawatomie SFL #2	40.15 39.76	0.76 7.23	0.76	6.67 3.26	27.50 61.60	Fair Good
Ellis City Lake	37.40	19.08	0.76	5.22	25.95	Good
Sedan New City Lake - South	37.25	15.69	0.00	3.68	32.82	Good
Holton - Banner Creek Lake	35.40	19.25	0.00	4.10	37.08	Fair
Olathe - Lake Olathe	34.29	18.10	1.90	5.56	44.45	Good
Miami SFL	34.29	26.67	1.90	5.09	34.84	Good
Paola City Lake - Lake Miola	33.65	18.27	0.00	4.15	29.37	Fair
Winfield City Lake Yates Center-South Owl Lake	33.09	16.18	0.00	3.16	25.94	Fair
Moline Old City Lake - South	32.31	14.62	0.00	4.52 2.35	39.15 62.13	Fair Good
Garnett - Cedar Creek Lake	30.73	11.98	0.00	4.14	44.66	Fair
Louisburg City Lake	30.19	0.00	0.00	1.61	30.19	Fair
Anthony City Lake	29.41	15.88	0.59	5.69	20.10	Fair
Ottawa SFL	27.45	10.29	0.00	4.15	31.12	Fair
Kingman SFL	26.47	20.00	0.00	4.30	28.05	Fair
Pottawatomie SFL #1	26.42	5.66	0.00	2.49	70.10	Fair
Atwood - Lake Atwood - Main	25.74 24.51	9.56	0.00	3.30	31.13	Good
Osage SFL Middle Creek State Fishing Lake	23.53	5.88 9.56	0.00	5.14 3.83	26.47	Fair Fair
Sedan Old City Lake - North	23.53	7.35	0.00	3.69	36.60	Good
Madison City Lake	22.55	11.76	0.98	6.17	36.44	Good
Kdot W. Borrow Pit (Wichita)	22.06	8.82	0.00	4.47	34.03	Fair
Belleville - Rocky Pond	20.55	15.07	0.00	3.31	19.46	Fair
Bourbon SFL	19.61	8.82	0.00	2.42	36.21	Good
Nebo SFL	17.65	11.76	0.00	3.55	49.91	Fair
Melvern River Pond	17.65	13.73	0.00	4.27	19.19	Fair
Logan City Lake Harvey County Lake-West	17.65 16.47	11.76 8.24	0.00 2.35	2.90 5.04	28.78 20.59	Fair Fair
Eureka City Lake	14.71	4.90	0.00	4.52	25.90	Fair
Sedgwick County-Lake Afton	13.37	7.49	0.53	5.45	14.77	Fair

LARGEMOUTH BASS	DENSITY RATING	PREFERRED RATING	LUNKER (,050)	BIGGEST FISH	3-YEAR AVERAGE	BIOLOGIST
LAKES	(712)	(210)	(120)	103	(12.)	\rightarrow
Wichita-Chisholm North Lake	11.86	6.78	3.39	5.63	11.49	Fair
Geary SFL	11.76	7.84	0.00	3.19	13.41	Fair
Jeffrey EC Make Up Lake	9.00	5.00	0.00	2.78	8.17	Fair
Council Grove City Lake	8.82	1.96	0.00	3.52	6.40	Fair
Centralia City Lake	8.82	5.88	0.98	4.80	10.33	Poor
Lebo City Lake	7.59	3.45	0.00	4.04	24.72	Poor
Harvey County Lake-East	5.29	2.94	0.00	3.17	14.14	Poor
Woodson SFL	3.57	2.68	0.00	3.39	3.57	Poor
Sabetha City Lake	2.13	2.13	0.00	3.81	2.13	Poor
Moline New City Lake - North	1.96	1.96	0.00	2.11	6.64	Poor
Olpe City Lake	1.18	0.00	0.00	1.26	3.36	Poor
PONDS						
Overbrook Kids Pond	144.44	0.00	0.00	1.43	76.07	Good
Emporia-Jones Park West Pond	114.29	7.14	0.00	1.56	119.05	Good
Holyrood City Lake	101.92	19.23	0.00	4.22	68.17	Excellent
Emporia-Jones Park North	100.00	23.08	0.00	2.57	68.53	Good
Salina-Lakewood Lake	95.24	57.14	0.00	2.83	101.75	Good
Sterling City Lake	78.85	26.92	0.00	3.63	79.22	Good
Olpe - Jones Park Pond	72.73	18.18	0.00	2.64	47.16	Good
Jewell City Lake - Emerson Lake	58.82	32.35	0.00	4.18	87.11	Good
Severy City Lake	55.88	11.76	0.00	2.87	63.57	Good
Edgerton City Lake	50.00	31.58	0.00	4.90	50.00	Good
Emporia-Jones Park East Pond	40.00	10.00	0.00	2.20	42.54	Good
Black Kettle State Fishing Lake	33.33	12.96	0.00	4.36	3.53	Fair
KDOT - E. Borrow Pit (Wichita)	30.00	17.50	0.00	4.29	21.06	Fair
Overbrook City Lake	25.53	10.64	0.00	4.45	19.71	Fair
Fall River State Park Kids Pond	10.00	10.00	0.00	1.64	10.00	Fair
Emporia-Peter Pan Park	9.09	4.55	0.00	3.40	27.08	Fair
SAUGEYE						
RESERVOIRS Sebelius Reservoir	12.40	2.50	0.00	4.01	9.43	Good
Council Grove Reservoir	1.86	1.64	0.50	6.05	1.71	Fair
Kanopolis Reservoir	1.43	0.48	0.19	5.10	3.74	Fair
Webster Reservoir	0.17	0.08	0.08	5.14	0.17	Poor
Tuttle Creek Reservoir	0.05	0.00	0.00	0.98	0.05	Poor
	0.00	0.00	0.00	0.,0	0.03	2000
LAKES	22.25	2 00	0.50	E 15	17 17	Cood

RESERVOIRS						
Sebelius Reservoir	12.40	2.50	0.00	4.01	9.43	Good
Council Grove Reservoir	1.86	1.64	0.50	6.05	1.71	Fair
Kanopolis Reservoir	1.43	0.48	0.19	5.10	3.74	Fair
Webster Reservoir	0.17	0.08	0.08	5.14	0.17	Poor
Tuttle Creek Reservoir	0.05	0.00	0.00	0.98	0.05	Poor
LAKES						
Graham Co-Antelope Lake	22.25	3.00	0.50	5.15	17.17	Good
Scott SFL	17.63	7.00	0.75	6.42	13.51	Excellent
Bone Creek Lake	8.75	4.00	0.13	4.39	5.58	Good
Wellington City Lake	5.50	4.67	0.83	7.14	7.56	Good
Centralia City Lake	5.38	2.13	0.63	7.37	3.79	Good
Carbondale City Lake - East	5.17	0.00	0.00	1.78	3.92	Good
Parsons City Lake	4.75	2.38	0.00	3.91	4.75	Good
Paola City Lake - Lake Miola	3.50	0.50	0.00	3.71	2.44	Good
Geary SFL	2.50	1.00	0.25	4.61	1.83	Fair
Olathe - Lake Olathe	2.17	1.50	0.33	5.00	1.17	Good
Middle Creek State Fishing Lake	2.17	1.50	0.33	5.73	2.06	Good
Sheridan SFL	1.88	0.38	0.00	2.82	2.56	Fair
Sabetha City Lake	1.83	1.50	1.33	6.97	1.83	Fair
Mcpherson SFL	1.60	1.30	0.30	4.66	1.93	Poor
Ottawa SFL	1.50	1.33	0.83	4.82	2.39	Fair
Harvey County Lake-East	1.44	1.00	0.00	3.74	1.19	Fair
Madison City Lake	1.33	1.17	1.00	5.95	1.11	Fair
Olpe City Lake	1.00	3.00	0.50	5.15	17.17	Good
Meade SFL	1.00	7.00	0.75	6.42	13.51	Excellent
Eureka City Lake	1.00	4.00	0.13	4.39	5.58	Good
Marion County Lake	1.00	4.67	0.83	7.14	7.56	Good
Lebo City Lake	1.00	2.13	0.63	7.37	3.79	Good
Atwood - Lake Atwood - Main	0.67	0.00	0.00	1.78	3.92	Good
Sedgwick County-Lake Afton	0.67	2.38	0.00	3.91	4.75	Good
Howard - Polk Daniels Lake	0.50	0.50	0.00	3.71	2.44	Good
Garnett City Lake - North	0.50	1.00	0.25	4.61	1.83	Fair
Moline New City Lake - North	0.50	1.50	0.33	5.00	1.17	Good
Douglas SFL	0.33	1.50	0.33	5.73	2.06	Good
Crawford SFL	0.33	0.38	0.00	2.82	2.56	Fair

SAUGEYE	(>12") RATING	(,51<) PREFERRED RATING	("05<)	BIGGEST FISH	(,714) 3-YEAR AVERAGE	BIOLOGIST Rating
LAKES Gardner City Lake	0.33	1.50	1.33	6.97	1.83	Fair
Sedan New City Lake - South	0.25	1.30	0.30	4.66	1.93	Poor
Pottawatomie SFL #2	0.25	1.33	0.83	4.82	2.39	Fair
Olathe - Cedar Lake Washington SFL	0.25 0.25	1.00	0.00 1.00	3.74 5.95	1.19	Fair Fair
Sedan Old City Lake- North	0.25	0.75	0.50	5.65	0.88	Fair
Garnett-Cedar Creek Lake	0.13	0.00	0.00	1.48	0.50	Poor
Ellis City Lake Shawnee SFL	0.00	0.33	0.00 0.25	3.52 3.94	1.33 0.75	Fair Fair
WIPER						
RESERVOIRS						
Webster Reservoir	12.00	1.00	0.08	9.17	6.03	Good
Sebelius Reservoir	7.80	0.80	0.10	15.19	7.03	Good
Milford Reservoir Kirwin Reservoir	3.80 3.17	0.90	0.05	7.86 7.36	3.63	Good
El Dorado Reservoir	3.00	2.13	0.00	5.92	3.02	Good
Clinton Reservoir	2.94	0.44	0.00	6.48	1.79	Good
Cheney Reservoir	2.85	2.00	0.07	9.27	4.06	Good
Marion Reservoir Lovewell Reservoir	2.73 1.10	0.93	0.00	5.38 5.84	2.07 1.36	Good
Glen Elder Reservoir	1.08	1.00	0.33	8.76	1.60	Fair
Pomona Reservoir	0.71	0.14	0.00	3.95	1.09	Fair
Wolf Creek Reservoir	0.30	0.30	0.00	5.81	0.17	Fair
Kanopolis Reservoir Cedar Bluff Reservoir	0.24	0.24	0.00	6.71	0.41	Poor Fair
LaCygne Reservoir	0.27	0.07	0.00	5.38	0.51	Fair
John Redmond Reservoir	0.05	0.05	0.00	5.03	0.05	Poor
LAKES	4 90	0.40	0.00	4.07	5.07	Good
Herington City Lake-New Sheridan SFL	6.80 4.88	0.60	0.00	4.87 2.85	5.27 2.29	Fair
Marion County Lake	4.75	0.00	0.00	2.85	3.75	Good
Centralia City Lake	2.75	1.13	0.00	5.82	1.50	Good
Coldwater Lake	2.20	2.20	0.00	8.05	1.27	Good
Jeffrey EC Make Up Lake Jetmore City Lake	2.00 1.67	0.33	0.00	4.01 2.95	3.72 0.83	Good Fair
Gridley City Lake	1.33	1.33	0.00	4.73	1.67	Fair
Graham Co-Antelope Lake	1.00	1.00	0.00	6.15	1.25	Fair
Yates Center City Lake-New	0.83	0.50	0.00	3.58	0.56	Fair
Lebo City Lake	0.75 0.50	0.75	0.00	4.18 4.18	0.50	Poor Fair
Carbondale City Lake - East Sabetha - Pony Creek Lake	0.33	0.33	0.17	6.68	1.44	Fair
Middle Creek SFL	0.33	0.33	0.17	4.43	0.44	Fair
Lyon SFL	0.17	0.17	0.17	6.15	0.25	Fair
Crawford SFL	0.17	0.00	0.00	2.11	0.33	Good
Moline New City Lake - North Jeffrey EC Aux Make Up Lake	0.17 0.13	0.00	0.00	2.60	0.06	Poor Fair
Garnett City Lake-North	0.00	0.00	0.00	1.32	0.00	Poor
Eureka City Lake	0.00	0.00	0.00	1.29	0.39	Poor
Horton-Mission Lake Paola City Lake – Lake Miola	0.00	0.00	0.00	0.85	0.08	Poor
PONDS						
Sterling City Lake	0.75	0.00	0.00	2.20	0.25	Poor
Atchison City Lake #7	0.67	0.33	0.00	4.24	0.67	Poor
WHITE CRAPPIE						
RESERVOIRS	60.00	722	2022		10.05	2 100
Pomona Reservoir	23.83	6.83	1.89	1.27	19.80	Excellent Good
Marion Reservoir Hillsdale Reservoir	15.88 12.06	3.63 7.75	1.25	1.59	10.30 20.48	Good
Lovewell Reservoir	11.86	2.29	0.29	1.24	29.79	Good
Tuttle Creek Reservoir	11.75	10.25	1.25	1.66	11.75	Excellent
Melvern Reservoir	9.94	6.75	0.63	1.55	11.60	Good

WHITE	Εg	EFERRED TING	E 9	EST	AGE AGE	DGIST NG
CRAPPIE	(,71<) DENSITY	(>15")	(,05<)	BIGGEST FISH	(>12")	BIOL
RESERVOIRS	(-1-)	()	(-2-)		()	$\overline{}$
El Dorado Reservoir	9.75	8.50	3.56	2.10	7.36	Good
Toronto Reservoir	6.31	2.50	0.81	1.72	8.10	Good
Milford Reservoir Perry Reservoir	5.44	4.06	1.31 0.67	1.95	5.44 13.50	Good
Wolf Creek Reservoir	4.94	2.24	0.35	1.48	4.56	Fair
Big Hill Reservoir	4.80	2.30	0.50	1.02	4.17	Good
Fall River Reservoir	4.13	0.75	0.63	1.53	5.44	Good
Council Grove Reservoir	3.62	2.62	0.92	1.53	5.07	Good
Glen Elder Reservoir Cheney Reservoir	3.50 2.40	0.58 1.40	0.33	2.02 0.73	2.86	Good Fair
Clinton Reservoir	1.69	0.94	0.13	1.07	7.75	Fair
LaCygne Reservoir	1.62	0.94	0.31	1.17	3.10	Good
John Redmond Reservoir	1.38	1.06	0.13	1.91	3.41	Fair
Webster Reservoir Elk City Reservoir	1.13	0.25	0.00	0.84 1.95	3.38 7.14	Good
Sebelius Reservoir	0.70	0.30	0.00	0.88	0.73	Fair
Kirwin Reservoir	0.69	0.31	0.25	1.98	3.73	Good
Cedar Bluff Reservoir	0.44	0.44	0.00	0.71	0.46	Poor
Kanopolis Reservoir Wilson Reservoir	0.42 0.13	0.17	0.08	1.12	2.74 0.07	Good Fair
LAKES	43.33	8.00	0.67	1.76	43.33	Good
KDOT W. Borrow Pit (Wichita) Olathe – Cedar Lake	33.00	3.50	0.50	1.04	47.33	Good
Parsons City Lake	29.63	10.88	2.50	1.66	29.63	Good
Garnett-Cedar Creek Lake	29.13	14.88	2.25	1.31	32.92	Good
Kingman SFL	28.20	24.80	6.00	2.62	22.72	Good
Mcpherson SFL Alma City Lake	27.83 24.25	18.83 13.50	2.33 0.50	1.18	5.44 15.38	Good
Wellington City Lake	23.00	8.75	2.50	1.39	13.41	Good
Ottawa SFL	22.33	2.00	0.83	1.70	4.89	Good
Shawnee SFL	21.50	3.50	0.75	0.87	10.08	Fair
Yates Center-South Owl Lake	20.60	11.40	2.40	1.60	16.21	Good
Sabetha City Lake Herington City Lake-New	19.50 17.00	15.50 1.75	4.25 0.50	1.39	2.25 17.00	Excellent Fair
Sedan Old City Lake- North	16.00	4.50	0.50	1.08	15.00	Good
Ellis City Lake	14.33	4.67	2.33	1.17	6.89	Fair
Marion County Lake	14.33	6.67	0.33	1.09	9.04	Good
Pleasanton West Lake Sedgwick County-Lake Afton	13.50 13.40	8.50 0.80	0.00	0.78	13.51 8.13	Excellent Fair
Olpe City Lake	12.50	2.25	1.00	1.25	9.92	Fair
Eureka City Lake	11.75	2.75	1.25	1.28	35.75	Fair
Howard-Polk Daniels Lake	11.00	2.25	0.50	0.98	27.17	Fair
Moline New City Lake - North	11.00	8.25	1.25	1.41	17.75	Good
Centralia City Lake Neosho State Fishing Lake	9.38 9.25	2.25 1.50	0.38	1.31	6.58 8.92	Good
Council Grove City Lake	9.00	1.75	0.00	0.59	11.83	Fair
Carbondale City Lake - East	9.00	2.50	1.00	1.10	6.88	Fair
Scott State Fishing Lake	7.88	5.13	0.38	1.28	9.07	Fair
Jeffrey EC Make Up Lake	7.25 7.25	3.75 7.25	0.25 3.25	0.93	4.58 8.50	Fair Good
Lebo City Lake Brown State Fishing Lake	7.00	1.25	0.25	0.91	7.00	Good
Wichita-Chisholm North Lake	6.75	2.00	0.75	1.19	6.75	Fair
Sheridan SFL	6.38	2.00	1.00	1.23	2.71	Fair
Olathe - Lake Olathe	6.25	2.50	0.25	1.10	12.08	Fair
Garnett City Lake-North Middle Creek SFL	6.25	3.00 1.75	0.50	0.84 1.01	4.00 6.58	Fair Fair
Pottawatomie SFL #2	5.50	2.00	0.25	1.33	2.83	Fair
Nebo SFL	5.50	1.00	0.25	1.18	14.83	Fair
Miami SFL	5.25	1.00	1.00	1.63	11.42	Fair
Lyon SFL	5.25 5.14	4.25	2.75 0.71	1.76 0.90	4.58 4.84	Fair Fair
Jeffrey EC Aux. Make Up Lake Horton-Mission Lake	5.00	1.00	0.25	1.12	9.50	Fair
Garnett City Lake-South	5.00	1.00	0.00	0.80	4.75	Fair
Mound City Lake	5.00	0.75	0.50	1.23	5.00	Fair
Washington SFL	4.67	3.67	1.33	1.40	4.47	Fair
Madison City Lake	4.50 4.40	1.75 0.00	0.50	2.07	3.17 6.80	Poor Fair
Horsethief Reservoir Atchison City Lake #23	4.00	1.00	0.00	0.35	4.00	Fair
Yates Center City Lake-New	4.00	3.40	0.40	1.38	8.20	Fair
Wilson SFL	4.00	1.75	1.75	1.33	1.50	Fair

WHITE CRAPPIE	(>12+)	(.51<) RATING	(>20°)	FISH	(,21<) 3-YEAR AVERAGE	BIOLOGIST
LAKES Harvey County Lake-West	3.50	1.00	0.50	1.36	3.66	Poor
Butler SFL	3.00	0.75	0.50	0.00	5.75	Poor
Bourbon SFL Sedan New City Lake - South	2.25	1.00	0.00	1.58 0.24	5.13 2.75	Fair Fair
Meade SFL	2.00	0.25	0.25	0.98	2.05	Poor
Fort Scott City Lake	2.00	1.16	0.33	0.56	0.63	Fair
Anthony City Lake Belleville - Rocky Pond	1.80 1.75	0.40	0.20	1.75	1.80 4.36	Poor
Paola City Lake - Lake Miola	1.75	1.00	0.50	0.87	4.42	Fair
Pleasanton East Lake Douglas SFL	1.75 1.67	1.75 0.33	0.00	2.13 0.48	1.70 2.14	Fair Poor
Montgomery SFL	1.50	0.25	0.00	0.59	1.08	Fair
Louisburg City Lake	1.50	1.50	1.00	1.28	1.50	Fair
Clark SFL Moline Old City Lake - South	1.33	0.89	0.33	1.19	1.42 4.67	Fair Fair
Harvey County Lake - East	1.20	1.00	0.60	1.32	5.43	Fair
Holton - Banner Creek Lake	0.75	0.25	0.13	0.99	6.50	Fair
Pratt County Lake Crawford SFL	0.50	0.25	0.00	0.71	0.50	Poor Fair
Gardner City Lake	0.50	0.50	0.00	0.71	0.50	Fair
Pottawatomie Sfl #1	0.33	0.00	0.00	0.24	0.86	Poor
Wichita-South Lake Barber SFL - Lower	0.25	0.00	0.00	0.37	0.25 3.61	Poor
Geary SFL	0.00	0.00	0.00	0.00	1.33	Poor
PONDS KDOT - E. Borrow Pit (Wichita)	8.50	3.00	0.00	0.67	8.50	Poor
Fort Scott Gunn Park W Pond #2	5.50	0.50	0.00	0.51	5.50	Fair
Atchison City Lake #7	3.50	1.00	0.50	1.82	3.50	Poor
Severy City Lake	1.50	1.00	0.00	0.58	0.75	Poor
BLUEGILL						
RESERVOIRS Sebelius Reservoir	57.10	1.30	0.00	1.51	28.77	Good
Cedar Bluff Reservoir	31.17	0.11	0.00	0.41	11.48	Good
Kanopolis Reservoir	19.25	0.00	0.00	0.34	7.62	Fair
Wilson Reservoir	11.47 9.38	0.13	0.00	0.34	5.40 9.48	Fair
Webster Reservoir Clinton Reservoir	4.69	0.06	0.00	0.33	2.81	Good Fair
Hillsdale Reservoir	4.56	0.06	0.00	0.36	3.58	Fair
Big Hill Reservoir LaCygne Reservoir	4.10 3.06	0.00	0.00	0.34	3.57 1.71	Good Fair
Perry Reservoir	2.67	0.00	0.00	0.34	1.53	Good
Lovewell Reservoir	2.50	0.00	0.00	0.32	1.85	Fair
Glen Elder Reservoir Marion Reservoir	2.21	0.38	0.17	0.45	3.36 3.45	Fair Poor
Milford Reservoir	1.31	0.13	0.00	0.43	1.31	Fair
Melvern Reservoir	1.06	0.00	0.00	0.29	0.54	Poor
Kirwin Reservoir Fall River Reservoir	0.94	0.00	0.00	0.33	3.29 0.72	Fair Poor
Pomona Reservoir	0.83	0.00	0.00	0.25	0.82	Poor
Cheney Reservoir	0.40	0.00	0.00	0.22	0.40	Poor
El Dorado Reservoir Wolf Creek Reservoir	0.38	0.00	0.00	0.20	0.88	Poor Poor
Council Grove Reservoir	0.23	0.00	0.00	0.17	0.10	Poor
Tuttle Creek Reservoir	0.19	0.00	0.00	0.35	0.19	Poor
John Redmond Reservoir Toronto Reservoir	0.19	0.00	0.00	0.18	0.16	Poor Poor
Elk City Reservoir	0.06	0.00	0.00	0.16	0.54	Poor
Plainville Lake	111.50	9.50	0.00	0.50	66.17	Good
Rooks State Lake Cowley SFL	64.00 27.25	6.00 0.75	0.00	0.49	45.67 15.81	Good
Jewell SFL	26.20	0.40	0.00	0.34	12.18	Good
Wichita-Chisholm North Lake	25.50	0.00	0.00	0.34	25.50	Good
Bone Creek Lake Ellis City Lake	25.00 22.67	0.50	0.00	0.44	9.46 8.89	Good Fair
Olathe - Cedar Lake	22.50	0.00	0.00	0.17	11.83	Good
Logan City Lake	20.00	0.00	0.00	0.22	13.00	Good
Sedgwick County-Lake Afton Parsons City Lake	20.00 19.50	0.00	0.00	0.39	7.73 19.50	Fair Good
Graham Co-Antelope Lake	19.00	4.50	0.00	0.61	13.72	Good
Wilson SFL	17.00	1.25	0.00	0.66	8.83	Good
Washington SFL Olathe - Lake Olathe	17.00	0.00	0.00	0.36	11.08	Fair Fair
Scott SFL	16.75 16.25	0.00	0.00	0.27 0.37	8.58 14.94	Good
McPherson SFL	16.17	0.00	0.00	0.28	13.72	Good

BLUEGILL	DENSITY	PREFERRED	LUNKER	BIGGEST FISH	3-YEAR AVERAGE	BIOLOGIST Rating
	(>12")	(>15")	(>20")	lbs	(>12")	
Louisburg City Lake	13.50	1.50	0.00	0.41	13.50	Good
Miami SFL	13.50	0.00	0.00	0.28	10.50	Good
Eureka City Lake	11.75	0.00	0.00	0.27	12.58	Good
Paola City Lake - Lake Miola	11.25	0.25	0.00	0.29	7.50	Good
Lyon SFL Marion County Lake	9.00	1.00	0.00	0.49	9.17 8.13	Good
Garnett City Lake-South	8.00	0.00	0.00	0.21	6.00	Good
Garnett-Cedar Creek Lake	7.88	0.00	0.00	0.30	10.96	Good
Shawnee SFL	7.00	0.25	0.00	0.35	3.42	Fair
KDOT W. Borrow Pit (Wichita) Atwood - Lake Atwood - Main	7.00 5.67	0.00	0.00	0.25	7.00 2.67	Fair Fair
Centralia City Lake	5.50	0.00	0.00	0.28	2.63	Fair
Sheridan SFL	5.50	0.00	0.00	0.32	2.08	Fair
Alma City Lake	5.00	0.00	0.00	0.37	4.00	Fair
Fort Scott Gunn Park W Pond #2 Mound City Lake	5.00 4.75	0.00	0.00	0.29	5.00 3.18	Fair Fair
Belleville - Rocky Pond	4.50	0.00	0.00	0.26	2.78	Good
Neosho State Fishing Lake	4.25	0.00	0.00	0.33	2.86	Good
Yates Center-South Owl Lake	3.20	0.00	0.00	0.30	1.80	Fair
Gardner City Lake Madison City Lake	3.00 2.75	0.00	0.00	0.35	2.50	Good
Montgomery SFL	2.75	0.00	0.00	0.33	5.00	Good
Geary SFL	2.75	0.00	0.00	0.25	1.25	Fair
Atchison City Lake #23	2.50	0.50	0.00	0.67	2.50	Fair
Carbondale City Lake - East	2.50	0.00	0.00	0.24	1.63	Fair
Sedan Old City Lake - North Pottawatomie SFL #1	2.50	0.00	0.00	0.22	2.00	Fair Fair
Douglas SFL	2.33	0.33	0.00	0.32	2.36	Fair
Jeffrey EC Make Up Lake	2.25	0.00	0.00	0.30	1.75	Poor
Clark SFL	2.22	0.22	0.00	0.43	1.61	Fair
Anthony City Lake	2.20	0.00	0.00	0.23	1.90	Fair
Harvey County Lake - East	2.00	0.00	0.00	0.39	2.23	Fair Fair
Council Grove City Lake Lacrosse-Warren Stone Lake	2.00	0.00	0.00	1.08	2.00	Good
Moline Old City Lake - South	2.00	0.00	0.00	0.22	2.92	Fair
Pottawatomie SFL #2	2.00	0.00	0.00	0.28	0.92	Fair
Gridley City Lake	1.75	0.25	0.00	0.54	0.75	Fair
Fort Scott City Lake	1.67	0.33	0.00	0.38	1.52	Fair
Garnett City Lake-North Howard-Polk Daniels Lake	1.50	0.00	0.00	0.24	1.63	Fair Fair
Wichita-South Lake	1.25	0.00	0.00	0.15	1.25	Poor
Yates Center City Lake-New	1.20	0.00	0.00	0.21	0.60	Fair
Jeffrey EC Make Up Lake	1.14	0.00	0.00	0.25	2.96	Fair
Middle Creek SFL Pleasanton West Lake	1.00	0.00	0.00	0.16	1.42	Poor Fair
Wellington City Lake	0.75	0.00	0.00	0.00	0.75	Fair
Sabetha City Lake	0.75	0.00	0.00	0.24	1.00	Poor
Pratt County Lake	0.75	0.00	0.00	0.26	0.75	Good
Pleasanton East Lake	0.75	0.00	0.00	0.17	1.13	Fair
Lenexa Lake - Lenexa Lebo City Lake	0.50	0.00	0.00	0.15	13.50	Poor Poor
Bourbon SFL	0.50	0.00	0.00	0.24	1.00	Poor
Sabetha - Pony Creek Lake	0.50	0.00	0.00	0.28	0.92	Poor
Horton-Mission Lake	0.50	0.00	0.00	0.21	0.25	Poor
Herington City Lake-New	0.25	0.00	0.00	0.21	0.50	Poor
Horsethief Reservoir Holton - Banner Creek Lake	0.20	0.00	0.00	0.18	1.19 4.65	Fair Poor
Crawford SFL	0.00	0.00	0.00	0.11	0.50	Fair
Harvey County Lake-West	0.00	0.00	0.00	0.09	0.33	Poor
Ottawa SFL	0.00	0.00	0.00	0.00	0.17	Poor
Barber SFL - Lower	0.00	0.00	0.00	0.07	0.17	Good
Nebo SFL Meade SFL	0.00	0.00	0.00	0.09	0.00	Poor Fair
Goodman SFL	0.00	0.00	0.00	0.09	0.00	Fair
Butler SFL	0.00	0.00	0.00	0.00	0.50	Poor
Moline New City Lake - North	0.00	0.00	0.00	0.15	0.17	Poor
Brown SFL	0.00	0.00	0.00	0.09	1.17	Poor
Leavenworth SFL Woodson SFL	0.00	0.00	0.00	0.07	0.75	Poor Poor
Kingman SFL	0.00	0.00	0.00	0.16	0.88	Poor
Olpe City Lake	0.00	0.00	0.00	0.04	0.00	Poor
PONDS Jewell City Lake - Emerson Lake	41.00	4.00	0.00	0.49	15.78	Good
Sterling City Lake	30.67	0.00	0.00	0.49	15.67	Good
Severy City Lake	12.50	0.00	0.00	0.17	13.17	Good
KDOT - E. Borrow Pit (Wichita)	2.00	0.00	0.00	0.19	2.00	Fair
Atchison City Lake #7	0.00	0.00	0.00	0.06	0.00	Poor

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BLACK	TSE TSE	E S	E SE	BIGGEST	ERA	TING
CRAPPIE	(>12")	(>15")	32	lbs	(>12")	28
RESERVOIRS	(>IZ)	(>15)	(>20")	LDS	(>12)	_
Cedar Bluff Reservoir	19.78	1.72	0.00	0.74	8.65	Good
Kirwin Reservoir Sebelius Reservoir	13.19 10.90	11.69	3.63 0.40	1.49	15.08	Good Good
Webster Reservoir	6.25	2.06	0.00	0.92	5.65	Good
Glen Elder Reservoir	4.29	3.50	0.21	1.26	7.06	Fair
Kanopolis Reservoir Lovewell Reservoir	2.50	1.42	0.08	0.97	4.82 3.38	Fair Fair
Marion Reservoir	1.25	0.21	0.07	1.06	2.53	Fair
Clinton Reservoir	1.06	1.00	0.13	1.10	0.56	Fair
Big Hill Reservoir	0.90	0.30	0.20	0.92	0.83	Fair
Hillsdale Reservoir Wilson Reservoir	0.50	0.13	0.06	1.36	0.50 1.02	Poor Fair
Perry Reservoir	0.17	0.17	0.00	0.75	0.10	Poor
Milford Reservoir	0.13	0.06	0.06	1.63	0.13	Poor
El Dorado Reservoir Fall River Reservoir	0.13	0.13	0.06	1.19 0.69	0.15	Poor Poor
John Redmond Reservoir	0.06	0.06	0.00	0.48	0.72	Poor
Tuttle Creek Reservoir	0.06	0.00	0.00	0.35	0.06	Poor
Toronto Reservoir	0.06	0.00	0.00	0.30	0.06	Poor
Wolf Creek Reservoir Cheney Reservoir	0.06	0.06	0.06	0.96	0.37	Poor Poor
Elk City Reservoir	0.00	0.00	0.00	0.00	0.03	Poor
LAKES						
Rooks State Lake	59.50	2.50	0.00	0.59	29.67	Good
Plainville Lake Douglas SFL	55.50 28.33	0.50	0.50	1.40 0.68	34.17 18.78	Good
Belleville - Rocky Pond	22.00	0.50	0.00	0.59	8.17	Good
Jewell SFL	15.60	2.40	0.00	0.70	19.28	Good
Anthony City Lake	14.80	9.00	0.20	1.00	12.00	Good
Council Grove City Lake Graham Co - Antelope Lake	7.25 7.00	0.50 5.00	0.00	1.20	4.83 19.14	Fair Good
KDOT W. Borrow Pit	7.00	2.33	0.00	0.72	7.00	Fair
Miami SFL	6.25	0.50	0.25	0.85	3.83	Fair
Neosho SFL	5.50	0.25 2.25	0.00	0.53	4.44	Good Good
Alma City Lake Brown SFL	5.50 4.75	0.00	0.00	0.65	4.50 2.42	Fair
Gridley City Lake	4.00	2.25	0.50	1.08	4.44	Fair
Atwood - Lake Atwood	4.00	1.00	0.33	1.31	2.17	Fair
Wilson SFL Kingman SFL	3.75 3.60	1.25	0.25 1.40	1.10 1.35	2.25	Fair Fair
Shawnee SFL	3.50	0.25	0.00	0.59	2.00	Fair
Lyon SFL	3.50	2.50	1.00	1.31	2.25	Fair
Paola City Lake - Lake Miola	3.00	1.75	0.00	0.75	1.83	Fair
Herington City Lake-New Garnett City Lake-South	3.00	3.00 0.50	0.50	1.03 1.26	3.33	Fair Fair
Gardner City Lake	2.50	0.25	0.00	0.48	2.50	Fair
Howard-Polk Daniels Lake	2.00	0.50	0.00	0.56	2.33	Poor
Pottawatomie SFL #1	2.00	0.00	0.00	0.34	1.83	Fair
Yates Center City Lake Bone Creek Lake	1.88	1.50	0.00	1.10	1.20	Fair Good
Parsons City Lake	1.75	0.00	0.00	0.53	1.75	Fair
Garnett City Lake - North	1.75	0.00	0.00	0.42	2.50	Fair
Barber SFL - Lower Atchison City Lake #23	1.67 1.50	1.00	0.00	0.73	1.67	Poor Poor
Pottawatomie SFL #2	1.50	0.50	0.00	0.51	1.17	Fair
Olathe - Lake Olathe	1.50	1.25	0.75	1.44	1.17	Fair
Montgomery SFL	1.50	0.50	0.00	0.60	3.58	Fair
Moline Old City Lake - South Louisburg City Lake	1.50	0.50	0.25	1.55 0.88	1.92 1.50	Fair Poor
Logan City Lake	1.50	1.50	0.50	1.24	1.25	Fair
Ellis City Lake	1.33	0.00	0.00	0.53	1.17	Poor
Sedan Old City Lake - North	1.00	0.00	0.00	0.31	1.50	Fair
Harvey County Lake-East Middle Creek State Fishing Lake	1.00	0.80	0.20	1.01 0.29	1.79 1.42	Fair Poor
Mcpherson State Fishing Lake	1.00	0.50	0.00	0.64	2.11	Fair
Centralia City Lake	1.00	0.38	0.00	0.57	1.38	Fair
Yates Center-South Owl Lake	1.00	0.20	0.00	0.40	1.33	Fair
Holton - Banner Creek Lake Cowley State Fishing Lake	0.88	0.38	0.00	0.75	6.96	Fair Poor
Sabetha City Lake	0.75	0.75	0.25	1.01	0.50	Poor
Crawford State Fishing Lake	0.75	0.00	0.00	0.32	0.47	Fair

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BLACK	ENSIT	REFER	LUNKER	BIGGEST	YEAR	OLOGI
CRAPPIE	(>12")	(>15")	(>20")	lbs	(>12")	=≥
LAKES Nebo SFL	0.50	0.00	0.00	0.33	0.58	Poor
Lebo City Lake	0.50	0.00	0.00	0.47	0.25	Poor
Marion County Lake Sabetha - Pony Creek Lake	0.33	0.33	0.33	1.19 0.46	0.33	Poor Fair
Pratt County Lake	0.25	0.00	0.00	0.54	0.25	Poor
Harvey County Lake-West Sedgwick County-Lake Afton	0.25	0.00	0.00	0.22	1.26 0.13	Poor
Jeffrey EC Make Up Lake	0.14	0.00	0.00	0.68	0.32	Poor
Garnett-Cedar Creek Lake	0.13	0.00	0.00	0.39	0.13	Poor
Clark State Fishing Lake Woodson SFL	0.11	0.11	0.11	0.93	0.31	Poor Poor
Sheridan SFL	0.00	0.00	0.00	0.23	0.46	Poor
Horsethief Reservoir Sedan New City Lake - South	0.00	0.00	0.00	0.25	0.00	Fair Poor
Butler SFL	0.00	0.00	0.00	0.00	0.33	Poor
Ottawa SFL Leavenworth SFL	0.00	0.00	0.00	0.00	0.00	Poor Poor
	0.00	0.00	0.00	0.00	0.23	Poor
PONDS Sterling City Lake	4.00	0.33	0.00	0.61	3.00	Poor
Severy City Lake Atchison City Lake #7	0.50	0.00	0.00	0.28	0.00	Poor
KDOT - E. Borrow Pit (Wichita)	0.00	0.00	0.00	0.20	0.00	Poor
REDEAR SUNFISH						
Big Hill Reservoir	1.50	0.00	0.00	0.41	0.80	Fair
Kanopolis Reservoir LAKES	0.08	0.00	0.00	0.34	0.08	Poor
Douglas SFL Lyon SFL	15.00 7.75	0.33 3.25	0.00	0.81	23.83	Good Excellent
Bone Creek Lake	7.50	0.50	0.00	0.85	4.08	Good
Leavenworth SFL	7.00	0.00	0.00	0.36	5.50	Good
Jewell SFL Sedan Old City Lake - North	5.60 3.50	0.20	0.00	0.64	2.73 4.75	Good Good
Wilson SFL	3.50	1.25	0.00	0.87	3.92	Good
Neosho SFL Cowley SFL	3.25 2.50	0.00	0.00	0.43	4.14 8.00	Good Good
Pottawatomie SFL #2	2.00	0.00	0.00	0.43	1.33	Fair
Montgomery SFL Yates Center City Lake-New	2.00	0.00	0.00	0.37	4.25 3.00	Good
Moline Old City Lake - South	2.00	0.00	0.00	0.47	4.92	Fair
Woodson SFL	2.00	0.20	0.00	0.74	2.00	Poor
Yates Center-South Owl Lake Pleasanton East Lake	1.80 1.50	0.00	0.00	0.36	1.00	Fair Fair
Paola City Lake - Lake Miola	1.25	0.75	0.00	0.68	1.58	Fair
Shawnee SFL Fort Scott City Lake	1.25 1.17	0.25	0.00	0.58	2.50 0.58	Fair Poor
Gridley City Lake	0.75	0.50	0.00	0.76	1.78	Fair
KDOT W. Borrow Pit (Wichita)	0.67	0.67	0.00	1.18	0.67	Fair
Atchison City Lake #23 Lebo City Lake	0.50	0.00	0.00	0.26	0.50	Poor
Bourbon SFL	0.25	0.00	0.00	0.29	0.75	Fair
Middle Creek SFL Madison City Lake	0.25	0.00	0.00	0.33	0.38	Poor Poor
Howard-Polk Daniels Lake	0.25	0.00	0.00	0.29	0.19	Poor
Mound City Lake	0.25	0.00	0.00	0.24	0.13	Fair
Garnett-Cedar Creek Lake Pratt County Lake	0.25	0.00	0.00	0.34	0.38	Poor Poor
Kingman SFL	0.00	0.00	0.00	0.17	0.00	Poor
Parsons City Lake	0.00	0.00	0.00	0.17	0.00	Poor
Olathe - Lake Olathe Miami SFL	0.00	0.00	0.00	0.24	0.00	Poor Poor
Crawford SFL	0.00	0.00	0.00	0.20	0.06	Fair
Lenexa Lake - Lenexa	0.00	0.00	0.00	0.15	1.33	Poor

 PONDS

 Severy City Lake
 5.50
 1.50
 0.00
 0.50
 5.83
 Good



Daddy-Daughter Bonds

by Michael Pearce, staff writer

When his favorite fishing partner died, Glenn Personey of Wichita lost more than someone with whom he'd wet hundreds of lines. The partner was his only-child Ashley. She died in 2018 at the age of 31. Together they'd battled her illness for a decade.

Yet amid the countless surgeries, specialist visits, tests and tears, they'd also co-invented and patented a revolutionary new style of fly that outfished their traditional gear. Feedback from others was exhilarating.

"Fish can't handle it. It's like they feel they just have to eat it," Lonnie Schultz, Laramie, WY, reported of his experience with the flies.

Personey and Ashley had also perfected a fishing style to make fly-fishing much easier for all levels of anglers. Together, they started Bear River Tackle, headed by Ashley. The business was designed to promote the special flies, the technique and to keep the partners fishing together around the world.

Ashley died before she could take Bear River Tackle towards her dreams. Now, her father is pushing on.

Glenn Personey's first response to Ashley's death was to close their new business. Thoughts of his daughter changed his mind.

"Ultimately, I decided to go forward because of Ashley's love of fly-fishing," said her father. "It was also her company and I didn't want it to just end. I really wanted others to get a chance to enjoy the flies we designed."









TOP LEFT: Ashley and Glenn Personey formed a strong father-daughter bond through fishing. While fighting a genetic disorder, Ashley formed and ran Bear River Tackle. Her dad continues the company.

BELOW LEFT: Glen Personey continues to market Bear River flies and fishing bubbles, in honor of his late-daughter. She was head of the company when she died at

BELOW: Ashley Personey, at 26, was well into fighting the genetic disorder that eventually took her life. Her father, Glenn, continues the tackle company they started together.



Bear River Tackle



As well as a radically new design in flies, Glenn and Ashley Personey started their company to share a specialized fishing technique for using those flies.

"With a bubble and a fly, anybody who can cast a spinning reel can enjoy flyfishing," said Glenn Personey. "Even when Ashley was disabled, she could still cast a fly with a bubble and enjoy some really good fishing."

Ashley was Personey's daughter and business partner who died at 31. Together, they'd already started Bear River Tackle to sell a unique line of flies and the clear, plastic bubbles that can carry feathery flies too light to be cast with traditional gear.

"Bubble fishing" is an excellent way to get beginners into the sport. In tight quarters, where traditional fly lines easily tangle, it's the easiest way to cast a fly to hungry fish. It's the same when it's windy.

Personey said the use of bubbles has been popular in the western U.S. for many years. In Kansas, he's worked with children of single-digit ages, disabled anglers and some who've grown frustrated with the art of casting a fly line. All have done well.

The Bear River bubbles are designed to have water added if more weight is needed. Personey generally uses bubbles about half-filled with water. His Bear River flies generally trail about the length of his fishing rod behind the bubble. Often the bubble acts as an attractant.

"I like to create a commotion with the bubble, popping it across the water. It can really attract fish that end up taking the fly," said Personey. "I'll take on anybody with a fly rod and out-fish them with a bubble and the same fly. It's an easy way to cover a lot more water."

For more information about Bear River Tackle, go to https://www.bearrivertackle.com.



Born to Fish

Ashley Personey was born with her father's innate love of angling. As a toddler, he took her fishing at local waters. As she grew, so did their angling horizons. She quickly earned the nickname "Little Bear" because her ability to scoop a hooked fish up in a net reminded her father of a swiping up salmon. Hence, the name of the company.

Ashley become ill her senior year at Friends University. Her health went fast. She was eventually diagnosed with a genetic disorder that led to brain surgeries, serious mobility issues and painful seizures. Glen Personey retired from Koch Industries to be with his daughter through many long, out-of-state hospital stays.

Though her body changed greatly, Ashley's love of fishing never wavered. They talked of it often during challenging times. She endured a lot, physically, for a few minutes of fishing locally, often from a wheelchair or crutches. But her limitations had her at home when her father accidentally found the first step that led to their eventual joint venture.

He was in Arizona fishing with his own father. The trout had ignored a steady procession of their favored, time-honored flies. Then, Personey lifted a long forgotten, strange-looking creation from the depths of his fly box.

"I'm guessing I tied it way back when I didn't really know what properly tied flies were supposed to look like," he said. "It looked nothing like our other flies but when you're not catching any fish, you have nothing to lose."

Most traditional flies are sleek creations, especially those fished below the water's surface. Materials are tied upon the hook, so they naturally lay or lean backwards.

But the fly Personey tied on had small pheasant feathers tied near the eye of the hook and facing forward. It was gaudy compared to traditional flies.

The lake's trout loved the odd-ball creation.

Personey quickly caught a 21-inch rainbow and an 18-inch cutthroat trout. He snipped the fly from his line so he wouldn't lose it to a snag. He was anxious to show it to Ashley when he got home.

"She was really excited to hear about it and look at the fly when I got home," said Personey. "Thinking we might be on to something, we both sat down and started tying different variations of that original fly. We'd look at each other's creations and talk about them. It was fun but neither of us had any thoughts of selling them or starting a company at that time."

Father and daughter were quick to take their creations to local waters. As well as mobility issues, Ashley no longer had the strength and coordination for using a traditional, long fly rod. Her father rigged a traditional spinning rod with a clear, plastic bubble several feet above the fly. The bubble gave the line enough weight to cast the lightweight fly.

It was like throwing ribeyes to starving lions.

Sunfish have snatched up small versions of the flies. At a water where he'd done poorly with regular bass lures minutes before, Personey once caught eight bass to 23 inches on as many casts on a Bear River fly.

Several times Ashley had big channel catfish, a species not commonly caught on lures and flies, put a deep bow in her fishing rod and a huge smile on her face.

By then they'd studied the flies and learned it was largely the forward-facing feathers that made them so special. As well as laying back when the fly is tugged through the water, the shape of the feathers made them snap back when that movement stopped.

"It's the increased action in the fly from those feathers," said Personey. "They're not tied to look like an insect like a lot of flies, they're tied to look like a very active minnow. They have a lot more life than about any other fly. They're so different than anything else out there, which is why it was easy to get them patented."

Schultz, the Wyoming fly-angler, happened upon Personey at Nevada's legendary Pyramid Lake, a place renowned for huge cutthroat trout. He remembers nobody was catching fish as large as Personey. Schultz's catch quality and quantity increased when he tied on one of Personey's creations.

His best ended up being a 33-inch cutthroat.

"Nobody up and down the bank was catching the class of trout we did," said Schultz. "I'm totally convinced it was the fly that made the difference. I've used them (in Wyoming) and on several species of fish. The proof is in the pudding. I'm sure it's all the motion in the fly."

Personey and Ashley were both even more enthused after the flies did so well in Nevada. Things went well and fast with their new company. New models of flies were designed, a new website offered them to the public and a patent had been granted.

Then, Ashley died. The cause of death was never officially determined, though Personey suspects it was a seizure.

He still mourns her deeply.

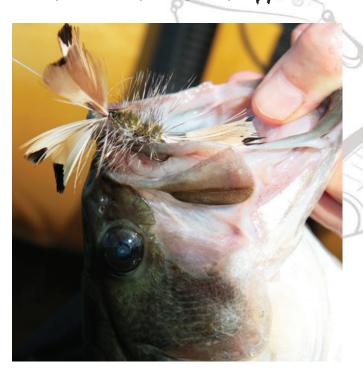
The grieving father put a few special flies in his daughter's casket. If Heaven is all it is billed to be, he figured Ashley would have ample opportunity to use

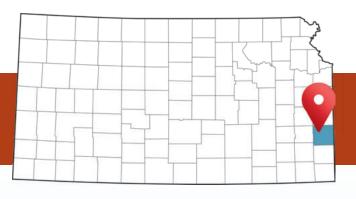
Personey has added new flies to the Bear River Tackle line. He wants to teach others how to use the plastic bubble system that served Ashley so well.

He also hopes it helps some fathers and daughters deepen their relationship through successful fishing, as he and Ashley had done.

Keeping the company moving is also a way he can feel closer to his daughter. It's the same when he goes

"When I am out there on the water, sometimes it feels like she is fly-fishing right along beside me," said Personey. "She was my fishing buddy."







The Little Pond That Could

KDWPT Fisheries biologist Don George reflects on one of his favorite projects throughout his career - the Fort Scott channel catfish rearing pond.



I've had the honor of working with many of Fort Scott personnel over the years. Ralph Davis (pictured) was most enthusiastic about watching the pond. He called me probably twice a week while the fish were stocked.



by Don George KDWPT Fisheries biologist

The Fort Scott channel catfish rearing pond has produced thousands of smiles and family memories - along with approximately 138,720 thousand pounds of channel catfish. As I drive by this pond, I see all of the smiles and memories produced and determine the extra work is well worth it. I understand that a first successful fishing trip, or the satisfying feeling an angler receives after fishing at one of the Fort Scott lakes or ponds, starts here.

The rearing pond is the result of a partnership between the City of Fort Scott and the Kansas Department of Wildlife, Parks and Tourism (KDWPT). The city created the pond when Fort Scott Lake was built, around 1958. The pond uses water from the lake to hold the fish throughout the summer. This water flows through the pond and returns to the Marmaton River, which flows downstream to the city's water intake. Through this management plan, water is used – but not lost – from the system.

The rearing pond has been in fish



Around 1,000 channel catfish, about a pound apiece, being stocked into the Fern Lake in Gunn Park. Fish stockings usually attract a crowd of people ready to catch some of these pan sized fish.

production since 1988. There are some production limitations because of the original design of the pond, which when exceeded can cause fish mortality. We have experimented with the numbers stocked, growth potential, size of fish, days of growth, feeding rates and more trying to produce the max number of channel catfish without exceeding the limitation. We have produced a good plan and successfully meet production goals each season.

Each year, usually in March, city staff fill the pond with water and KDWPT staff stock the pond with approximately 6,200 small channel catfish, averaging 7 to 8 inches. Feedings start around May when the water temperature reaches 70 degrees or warmer, and the catfish are "reared" or grown throughout the warmer water months.

City personnel feed five times a week and monitor the pond conditions while I monitor water quality and sample fish to determine growth and the amount that needs to be fed daily. For good growth, the fish are fed about 3 percent of their total weight per day. Each day, the total weight of the fish increase, so feed amounts continue to change; feeding more than 3 percent could be wasteful, costly and degrade water quality. On average, the channel catfish grow to approximately 18 inches before being stocked at Fort Scott area lakes and ponds.

After careful consideration of November weather, as well as the availability of city personnel and the Farlington Fish Hatchery, we decide the day to harvest. It takes several days to drain the pond, and equipment is double-checked before harvesting the fish. Equipment failure during the harvest may cause fish mortality.

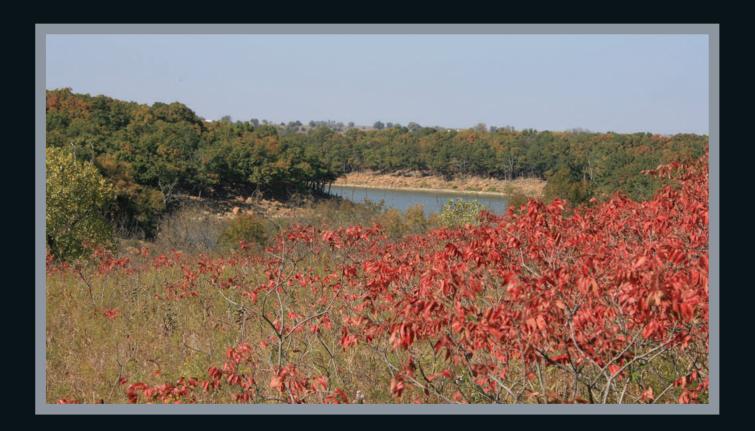
On harvest day, Farlington Fish Hatchery manager Dan Mosier and his staff bring three or four tank trucks and a crane truck, which is used to lift heavy nets full of fish – sometimes two

or three hundred pounds at a time. Several weighed samples of the fish are counted to determine fish per pound. With the number of fish per pound and the poundage loaded into a truck, we determine how many fish to load per gallon of water or tank per each lake's stocking request.

After the channel catfish are loaded into tanks with aerators and oxygen support systems, the fish are then treated with chemicals for three hours to remove any aquatic nuisance species that may occur. Next, the fish are released into one of the lakes in Fort Scott - Lake Fort Scott, Gunn Park Lake Fern and West Lake, and both of the Fort Scott Community College fishing ponds.

At last, channel catfish are ready to be caught by children, experienced anglers everyone in between, producing thousands smiles and memories in the Fort Scott community, all thanks to the rearing pond – the little pond that could.





If you enjoy leaving the beaten path to discover hidden gems of Kansas' nature, then accept the welcoming invitation of the Fall River State Park and surrounding Wildlife Area.

by Rick McNary, freelance writer and photographer

ocated roughly an hour and half drive east of Wichita, one must leave the well-traveled highways to reach an area rich with diverse ecosystems, wildlife and outdoor recreational opportunities. For the person who enjoys exploring the outdoors hiking, biking, canoeing, camping, boating, birding, fishing, hunting, or simply touring in car, Fall River invites you to enjoy her changing beauty at your own pace.

However, it's wise, before you go, to look at maps of both the Fall River State Park and the Fall River Wildlife Area to understand the vast geographical area it covers. For example, you might go to the state park area along the dam on the south end of the lake and miss the fact that you have access to enjoy the lake from that point northward to a public access southeast of Eureka off of Highway 99 where Fall River goes under a bridge. Between those two points are more than 9,000 acres of wildlife area; 2,400 acres of the reservoir and 1107 acres of state park to explore.

Fall River serves as a unique transition between two different ecosystems. On the southern end is the Chautauqua Hills, a small strip of land no wider 10 miles that ranges Kansas/Oklahoma border up to Yates Center.

Known for its red sandstone, this area is also home to an area of blackjack oak and post oak trees so dense that early settlers called it the Cross Timbers or Cast-Iron Forest. Northeast of Fall River is the Cross Timbers State Park with trees dating 300-400 years old. However, early settlers did not harvest these trees since they don't grow tall and straight - the ideal form for lumber. Neither did they burn or remove them for farming because the soil was predominantly red sandstone.

As you drive east from the dam to Sunflower Hill, slow down past the maintenance building and take notice of the stand of timber behind it. That is a stand of these famous trees. The Cross Timbers ecosystem stretches south to the east side of Dallas, Texas. This dense hardwood forest with thick underbrush was considered impenetrable by the early settlers who would travel for days to go around it.

The other ecosystem is the grasslands of the Flint Hills. The headwaters of the Fall River begin in the heart of the Flint Hills east of Cassoday, near Teterville. As it courses through limestone, not red sandstone, bottomed creeks lined with cottonwoods and sycamores, it eventually travels under Highway 99 east of Eureka, where the first public access to the

river is found; this is part of the Wildlife Area, managed by the Kansas Department of Wildlife Parks & Tourism. As you follow the river south from that point clear to the dam, all of that area near the river as it eventually opens into the lake is open for public use.

There are at least two sweeping vistas at Fall River State Park that you should visit to allow your imagination to wander back in time. On the west side of the lake, near the cabins perched on a hill, is a marker commemorating the construction of the dam in the late 1940s. From that area, including the front porches of the cabins, one can gaze over the vast expanse of the lake and the surrounding terrain. Imagine a group of people standing in a dry spot at the bottom of the dam in 1949 as they celebrated the completion of the construction. Kim Jones, state park manager who has been employed at Fall River State Park for almost two decades, remembers fondly the stories her father told of standing in that group celebrating the construction.

"They completed the dam in '49," Jones said.

"They projected that it would take five years to fill up. However, big rains came the following year and filled it up in a short period of time."

Another such place for your imagination to wander back in time is Sunflower Hill on the east side of the lake. As you gaze over the lake from that area, it's easy to imagine large herds of bison being stalked by Native American tribes like the Osage and Wichita who lived here centuries before.

Jones, a resident of the town of Fall River to the south, speaks fondly of the area which attracts outdoor adventurists and families.

"We make our rounds in the summer evenings, but seldom do we have problems with people making noise after quiet time," Jones said. "The people who come here bring their families, so it tends to be quieter."

Whether it's a day trip or an extended period of time camping at Fall River, there are numerous adventures to enjoy. The state park is divided into Fredonia Bay on the west side of the lake and Quarry Bay on the east side.

Fall River State Park hosts several events throughout the year, including the annual Fall River Rendezvous - a historical reenactment of the Mountain Man Era of 1800-1840.



Canoeing/Kayaking

From a spot on 99 Hwy, south and east of Eureka, the public has access to several miles of river for canoeing or kayaking. This access, and the river's normally lazy flow, makes it an easy half-day or all-day adventure for those types of watercraft. Rice Bridge, near Climax, is another popular put-in spot for canoers. Since the land is managed by the state park, primitive camping is allowed along the banks of the river in designated spots.

A drift along the river provides some of the best scenery in Kansas. Although it can be dangerous during high water, typically the river is ideal for novices or those seeking a lazy ride down a pristine Kansas setting.



Boating

There are boat ramps conveniently located in both campgrounds.

¥€ J Fishing

The 2,400-acre reservoir is known for crappie, bluegill, channel cat, largemouth bass, and, in particular, white bass. During the early spring, white bass move up Fall River and into Otter Creek above the reservoir. Fishing is popular off Ladd Bridge where schools of white bass can be seen as they move.

Hunting

The area is managed for a variety of game and non-game species. There are 8,632 acres open to public hunting of dove, quail, deer, turkey, rabbit, squirrel and waterfowl.

Fall River Wildlife Area hosts special youth dove hunts each year for youths age 15 and under.

Farming for wildlife, native plant restoration, timber management and prescribed burning are used to provide food and cover for a variety of wildlife including non-game species.

Trails

Fredonia Bay (west side of dam)

Casner Creek Trail is accessible at two trail- heads: one in the Casner Creek Campground and one at the youth fishing pond at the entrance to South Rock Ridge Area. This trail, rated moderately difficult, wanders through both a wooded and prairie

Turkey Run Trail runs through a wooded ravine, crosses a stream and ascends across the tallgrass prairie that features a panoramic view of Fall River Lake and the Flint Hills. The trail is rated moderately difficult and lends itself to bald eagle sightings during the winter months and is open to hikers and cyclists.

Quarry Bay (east side of dam)

Overlook Trail is ADA accessible with an interpretive sign and allows for a viewing of the lake from a wooded deck.

Post Oak Trail loop meanders along parts of Craig Creek, weaving you in and out of blackjack and post oaks, red sandstone and grass meadows. This is rated a moderate challenge for hikers and cyclists.

Catclaw Trail wanders through tallgrass prairie, sloping sandstone ridges, and wooded oak savannahs, a favorite feature is the panoramic view of lake. The trail is moderate in difficulty, open to hikers and cyclists.

The Bluestem Prairie trail can be accessed by the Catclaw trail or the north end of the quarry in Quarry Bay. Native grasses dominate the landscape changing from high prairie to low woodlands. This is a moderate trail, open to hikers and cyclists.

M Camping

Reservations can be made at: www.reserveamerica.com.

Non-Peak – Jan. 1-March 31 Peak – April 1 – Oct. 31 Non-Peak – Nov. 1 – Dec. 31

Modern Cabins – 3 Water and Electric Sites - 44 Primitive Sites – 43

Special Events

First Day Hike Jan. 1, 2021 May 1, 2021 OK Kids' Day June 5, 2021 National Trails Day Aug. 7, 2021 **Star Party** Sept. 25, 2021 Fall River

> Rendezvous/ National Public Lands Day

Nov. 26, 2021 Black Friday



Park Manager Kim Jones

Park Office (620) 637-2213 66777 (on Toronto Lake)

Gate house to Fall River 2381 Casner Creek Rd. (2 miles north of US-400 on Z50 Rd) Fall River, KS 67047











Kansas State Park

FREE ENTRANCE DAY 2021

MAY

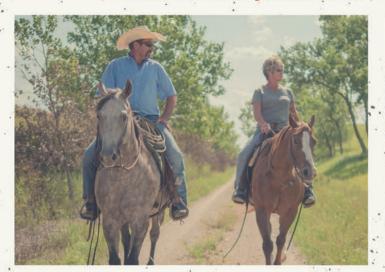
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The Kansas Department of Wildlife, Parks and Tourism invites you to go outside on May 1 and enjoy the best of nature that Kansas has to offer. The normal entrance fee will be waived that day at all of Kansas state parks.



Please note: Camping and utility fees are required to stay overnight.

To find the state park nearest you, visit www.ksoutdoors.com.







by Michael Pearce, staff writer

With spawning crappies and wild turkeys coming to calls, springtime can be a tasty time in the Kansas outdoors. But most anglers and hunters will turn into mushroom gatherers when they find a patch of morels. Something magical happens when cleaned morels are soaked a bit in eggwash, rolled in saltine cracker crumbs and fried in butter.

Morels sautéed with snippets of fresh asparagus, often found growing wild around old homestead, is also superb. Occasionally it's fun to add a bit more of a gourmet flair to the morels.

Ingredients

- 12-15 morels, large work best, 5-8 inches or longer
- · 2 cups Ricotta (or similar) cheese*
- 11/2 cups fresh spinach
- 2 slices bacon, chopped
- 1 cup onion, finely chopped
- 1/2 teaspoon salt
- 1 teaspoon minced garlic
- 1 tablespoon butter

*Small flakes of crab or tiny pieces of shrimp can be added to the cheese.

Instructions

- . Snip where the stem meets the cap of each morel and soak in saltwater 30-60 minutes to clean. Rinse and let dry on a paper towel.
- Combine cheese, spinach, onion and salt (a food processor will help) and place in a plastic bag. Snip a corner of the bag so you can squeeze the filling into the morels.
- Spread butter, garlic and chopped bacon over the top of the morels.
- Bake at 350F, in a baking dish, for 30-35 minutes.

Preserving the Bounty

Those who hit the mother lode of morels can stash some away for later. One way is to split, clean and dry the morels as usual and dust them in seasoned flour. Flash fry for no more than two minutes per side and place on a paper towel to dry. Arrange on waxed paper on a cookie sheet, making sure none are touching and freeze, then place in zip-top bags.

Morels can be dried by hanging on thick sewing thread so none of the morels are touching. After a few days, they can be stored in jars in a refrigerator or frozen for use in sauces and soups at a later date.

SPECIES PROFILE: LOGGERHEAD SHRIKE

Don't let the size and appearance of this songbird fool you. An avid hunter, the loggerhead shrike is known to impale prey on sharp objects such as thorns and barbed wire, or even wedge them into tight places to easily eat. With a diet of mostly insects in the summer, the loggerhead shrike feasts on mice and other small mammals in all seasons due to its ability to successfully hunt and carry prey larger than itself. Snakes, frogs, lizards and even other birds are also on the menu. Bon appétit.



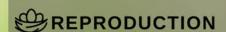






Typically found in open country with trees and scattered shrubs, loggerhead shrikes can also be found in more heavily wooded areas and habitats with few or no trees.

The loggerhead shrike is a species in a deep decline. It is estimated they have declined 76 percent in the last 50 or so years.



Nest Size: 5-6 eggs Incubation: 16-17 days

- Females can nest in Kansas. Males feed the females during incubation and both parents feed nestlings.
- In about 17-21 days, young will leave the nest, but are tended by parents for another 3-4 weeks.



It Takes a Velige(r)



Zebra mussels produce free-floating larvae called "veligers" that are about the diameter of a human hair and are so small you can't see them without a microscope.

Kansas is not immune from the growing number of aquatic nuisance species that threaten freshwater habitats. From curly-leaf pondweed and the rusty crayfish, to Eurasian watermilfoil and Asian carp, our Aquatic Nuisance Species coordinator, Chris Steffen - along with other Fisheries and Ecological Services staff - is hard at work fighting to keep these invasive pests at bay. While none are welcomed critters in Kansas waters, in my mind, none of these aquatic nuisances are as unwelcome as the zebra mussel.

A native to the Black and Caspian Sea in Europe, it's believed that zebra mussels found their way into Kansas waters around 2003. Zebra mussels are most often spread method by outdoor recreationalists who unknowingly transport equipment - such

as boats and jet skis - with zebra mussels attached (this is why it's so critical to "Clean, Drain, and Dry" vessels before leaving a waterbody.)

A recent news release issued by the Department explains why zebra mussels are so destructive: Once established, zebra mussels can quickly take over a waterbody and cause significant damage, including clogging water intakes and delivery systems, disrupting the food chain, and changing the chemistry of the water which can lead to things such as blue-green algae.

Recent reports to the to U.S. Geological Survey (USGS) have indicated that zebra mussels are now finding their way to states through a new vehicle - the aquarium plant product known as "moss balls."

According to the USGS, moss balls are

defined as: A species of green algae that is formed into a ball and is 2 to 5 inches in diameter. Moss balls are purchased for home aquariums (and) are found in pet stores nationwide.

Apart from aquariums, moss balls are also finding their way into homes as a decorative plant product that can be easily transported and cared for, and requires little space. But what happens when the novelty wears off, or owners choose to empty their aquariums? This is where the real risk lies.

Thanks to quick action by the USGS, U.S. Fish and Wildlife Service (USFWS). the federal Aquatic Nuisance Task Force and regional aquatic invasive species management groups, word is quickly spreading of the threat that may be looming in moss ball containers. And, thankfully, industry is taking note. The USFWS will continue to investigate moss ball products and has, in the mean time, issued best practices for disposal that include the following:

- Freezing the moss ball for 24 hours
- Placing the moss ball in boiling water for at least one minute
- Placing the moss ball in diluted chlorine bleach OR
- Submerging the moss ball in undiluted white vinegar for at least 20 minutes

Much like chronic wasting disease in deer and elk species, there's not yet a "silver bullet" that can rid us of these environmental "evils." But we, as Kansans and as stewards of the land, can do our part to "slow the spread" and prevent new areas from contamination. And rest assured, it will take both vigilance and a village - or should I say, "velige?"

For additional information on disposal methods for aquatic moss balls, see: https://www.fws.gov/fisheries/ANS/zebra -mussel-disposal.html

For more on aquatic nuisance species in Kansas, see ProtectKSV/aters.org.

KDWPT & KWF PRESENT

Flatlander P\$DCAST

Flat is a state of mind! Get to know the people, science, and stories that make the Kansas outdoors more than flyover country.

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